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Commonwealth of Massachusetts

MUNICIPAL REGISTER

OF THE

CITY OF SPRINGFIELD

FOR

—1922—

CONTAINING

CITY OFFICERS AND COMMITTEES, MAYOR'S ADDRESS, REPORTS OF THE VARIOUS OFFICERS AND COMMITTEES; ALSO, THE RECEIPTS AND EXPENDITURES FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1921.

PRESS OF
SPRINGFIELD PRINTING AND BINDING COMPANY,
SPRINGFIELD, MASS.
1922.

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Feb 7, 1928

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CONTENTS.

	PAGE
City Officers, 1922	9–15
City Officers, 1852-1921	883–908
Mayor's Address	17–27
Ordinances, 1921	853–866
Taxes	867–877
Valuation of Property	879–882
Reports of Departments.	
Auditor	669–830
Board of Health	503–542
Building Department	571–593
Charities	473–487
Chief of Police	185–206
City Physician	489–490
City Planning Board	543–569
Clerk	615–620
David P. Smith Fund	837
Fire Alarm Telegraph	173–174
Fire Commissioners	161–180
Inspector of Animals	501
Jury List	621–667
Law	595–599
Liquor License Commission	613
Park Commissioners	601–611
Police Commissioners	181–206
Schools	29–148
Superintendent	37–48
Sealer of Weights and Measures	497–499
Sinking Fund Commission	831–836
Soldiers' and Sailors' Graves	495
Soldiers' Relief Commissioner	491–493
Streets and Engineering	289–472
Administrative	289–313
Engineer	314–322
Streets	323–380
Sewers	381–467
Ashes and Garbage	468–470
Lighting	471–472
Superintendent of Public Buildings	149–160
Treasurer	839–852
Water Commissioners	207–288
Water Registrar	217–240
Superintendent of Water Works	241–247
Chief Engineer	249–253
Appendix	255–288

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CITY OFFICERS

FOR 1922

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CITY OFFICERS FOR 1922

Mayor

EDWIN F. LEONARD

Aldermen

JOHN J. LESTER, President

Ward 1: JOHN J. LESTER
Ward 2: ARTHUR W. BROWN
Ward 3: HARVEY W. VAN ALLEN
Ward 4: JOHN D. SHUART
Ward 5: RAYMOND B. SHATTUCK
Ward 6: FRANK M. KINNEY
Ward 7: AIME H. COTE
Ward 8: VICTOR N. BENGLE

CLIFFORD F. SMITH, Clerk

Common Councilmen

LEONARD S. STEBBINS, President

Ward 1: EMIL J. ERARD, EDWARD P. SLATTERY
Ward 2: EUGENE J. SWEENEY, DENIS A. HOGAN, JAMES P. MANNING
Ward 3: MAX J. BAKER, EDWARD C. LINCOLN
Ward 4: HERBERT A. HOLLAND, FRANCIS H. BAINES
Ward 5: FRED H. CLARKSON, A. OLIN SINCLAIR
Ward 6: LEONARD S. STEBBINS, EDWARD J. RUXTON
Ward 7: ARCHIE E. BRUCE, ROBERT BERRY
Ward 8: RALPH D. HERSEY, VERNON D. ODETTE, WILLIAM KIRK KAYNOR

GEORGE J. CLARK, Clerk

STANDING COMMITTEES OF THE CITY COUNCIL

COMMITTEES OF THE BOARD OF ALDERMEN

Enrollment—Aldermen Van Allen, Lester and Brown.
Elections and Returns—Aldermen Shattuck, Cote and Bengle.
Ordinances—Aldermen Lester, Bengle and Kinney.
Poles and Wires—Aldermen Shattuck, Kinney and Cote.
Itinerant Venders' Licenses—The Mayor and Aldermen Bengle and Shattuck.
State and Military Aid—The Mayor and Aldermen Brown and Shuart.
Rules of the Road—Aldermen Kinney, Shuart and Brown.

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COMMITTEES OF THE COMMON COUNCIL

Ordinances—Councilmen Slattery, Sinclair and Lincoln.
Enrollment—Councilmen Baines, Bruce and Hersey.
Elections and Returns—Councilmen Berry, Holland and Ruxton.

JOINT STANDING COMMITTEES

Finance—The Mayor, Alderman Kinney, the President of the Common Council and Councilmen Sweeney and Kaynor.

City Property—Aldermen Cote and Brown, Councilmen Baker, Odette and Hogan.

Fire Department—Aldermen Shuart and Brown, Councilmen Manning, Lincoln and Holland.

Pauper Department—Aldermen Van Allen and Lester, Councilmen Berry, Ruxton and Hersey.

Printing—The Mayor, President of the Common Council and Councilman Berry.

Board on Claims—The Mayor, Alderman Van Allen, and the President of the Common Council.

Supervisors of the Department of Streets and Engineering—The Mayor, Alderman Shattuck and Councilman Erard.

Firearms—Aldermen Cote and Lester, Councilmen Slattery, Holland and Hersey.

Police Department—The President of the Board of Aldermen, Alderman Cote, The President of the Common Council, Councilmen Sweeney and Clarkson.

Mayor's Messages—Aldermen Kinney and Shattuck, Councilmen Baines, Bruce and Slattery.

City Realty—Aldermen Bengle and Van Allen, Councilmen Clarkson, Bruce and Sinclair.

Signs—Alderman Brown, Councilmen Baines and Manning.

Municipal Market—Alderman Lester, Councilmen Berry and Ruxton.

Transportation—Aldermen Van Allen and Brown, Councilmen Kaynor, Bruce and Sinclair.

Legislative Matters—Aldermen Kinney and Cote, Councilmen Kaynor, Holland and Hersey.

CITY CLERK—Clifford F. Smith.

ASSISTANT CITY CLERK—Oliver C. Grant.

CLERICAL ASSISTANTS—Cora B. Haskell, Carrie M. Riley, Ida M. Sword, Alice G. Weymouth, Doris Lampson, Doris E. FitzPatrick.

CITY TREASURER—Eliphalet T. Tifft.

TREASURER'S DEPUTY—John P. Bishop.

PAYMASTER—George W. Rice, Jr.

ASSISTANT PAYMASTER—Francis E. J. Callaghan.

CLERICAL ASSISTANTS—Margaret E. McCaughan, Gertrude F. Little, M. Agnes Mansfield.

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CITY AUDITOR—Clifford E. Cook.

DEPUTY CITY AUDITOR—Ralph B. Spittal.

CLERICAL ASSISTANTS—Beatrice M. Brier, Hazel G. Campbell, Alice E. Hathaway, Isabelle Hicks, Gertrude E. McGibney, Gertrude Rowland, May Taylor.

CITY COLLECTOR—Charles A. Frazer.

DEPUTY COLLECTORS—Chief, Ralph L. Munn, Hazel M. Berard, Bertha L. Davis, Helen E. Mansfield.

CLERICAL ASSISTANTS—Raymond Eckert, Helen G. Gates, Hazel I. Mansfield, Helen L. Mullen, Margaret Reilly, Daisy J. Shackley, Marion Wheelock, M. Louise Williams, Florence Wright.

DEPUTY TAX COLLECTOR—William H. Carrigan.

ASSESSORS—Albert C. Lane, William E. Sanderson, George E. Mansfield, Jr.

ASSISTANT ASSESSORS—Mary E. Leavenworth, Bernal H. Adams, James W. Armeson, Thomas F. Quinlivan, Jr., Eugene L. Bengle, John W. Culver, John A. Fitzgerald, Charles E. Murray, Arthur E. Chase, John P. O'Connell, James M. Coughlin, Angelo M. Masucci, Edward H. Barrett, Edgar S. Ulrick, George Brackenbury, Edward J. Flannery, John C. McNeil, William P. Craig, Theodore Roberts, Theodore Camerlin, William P. MacFarlane, Ruth Ayles, Frank M. Maguire, Euclid J. Pigeon, George J. Foster, John J. Donoghue, Joseph Samuelton, Edwin R. Gifford, Michael Leonard.

CLERICAL ASSISTANTS—Mary R. Smith, Mabel C. Bemis, A. Evelyn Jewell, Minnie L. Barrett, Buena V. Barrett, M. Ethel Matthews, Florence M. Hyde, Nellie G. Smith, Eleanor A. Macomber, Susie E. Whitaker, Anna C. Rooney.

SOLDIERS' RELIEF COMMISSIONER—George A. Roberts.

OVERSEERS OF THE POOR—The Mayor, Dr. William A. R. Chapin, J. Stuart Kirkham, William R. Thacker, Christopher G. Simpson.

AGENT—Edward I. White.

ASSISTANT AGENT—Arthur A. Call.

CASHIER AND BOOKKEEPER—Jennie S. Lombard.

CLERICAL ASSISTANTS—Fannie L. Boxwell, Rose A. Keefe.

WELFARE NURSE—Mary D. Otis.

SUPERINTENDENT OF ALMSHOUSE—Charles E. Hadsell.

CITY PHYSICIAN—Dr. William A. R. Chapin.

CITY SOLICITOR—Josiah Dearborn.

ASSISTANT CITY SOLICITOR—Alfred C. Fairbanks.

CITY PROSECUTING ATTORNEY—John H. Madden.

MAYOR'S CLERK—Elizabeth H. Clark.

SUPERINTENDENT OF PUBLIC BUILDINGS—Hiram L. Dorman.

MESSENGER—James H. Lay.

SUPERINTENDENT OF THE DEPARTMENT OF STREETS AND ENGINEERING—Robert P. Marsh.

DIVISION SUPERINTENDENT OF STREETS—Arthur H. Woodward.

DIVISION SUPERINTENDENT OF SEWERS—Howard O. Buck.

DIVISION SUPERINTENDENT OF WASTE DISPOSAL—Edward G. Barnes.

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DEPUTY CITY ENGINEER—Charles M. Slocum.

CHIEF ENGINEER—Charles H. Restall.

BOARD OF HEALTH—Philip V. Erard, Chairman, Dr. Richard A. Rochford, Dr. Edgar H. Guild, Health Physician.

AGENT AND CLERK OF THE BOARD OF HEALTH—William L. Young.

CHIEF CLERK—Grace E. Warren.

OFFICE CLERKS—Mary E. MacDonnell, Anna C. O'Connell, Belle Lytle.

SANITARY INSPECTORS—Jacob R. Sackett, Chief, Wm. J. Hassett, Henry Wright, Jr., Alger P. Blaine, Wm. F. Boyle, Daniel J. Mahoney and John J. Boland.

SMOKE INSPECTOR—Dustin L. Tice.

SUPERINTENDENT OF SCHOOLS—James H. Van Sickle.

SUPERINTENDENT'S CLERK—Fred L. Ward.

SCHOOL COMMITTEE—The Mayor; at large, Ralph W. Ellis, Jr.; Ward One, Frederick A. Bassette; Ward Two, Timothy J. Collins; Ward Three, Chester T. Neal; Ward Four, Jeanne J. Starr; Ward Five, Charles H. Angell; Ward Six, Franklin A. Latimer; Ward Seven, George H. Foss; Ward Eight, Chester S. McGown.

ATTENDANCE OFFICER—John A. Parker.

ASSISTANT ATTENDANCE OFFICERS—Harry A. Killmer, Leonard W. Knight, Harry E. Handy, Edwin R. Lampshire.

SEALER OF WEIGHTS AND MEASURES—William Foster.

DEPUTY SEALERS OF WEIGHTS AND MEASURES—Ralph H. O'Malley, Charles B. Kingsbury.

INSPECTOR OF MILK—Stephen C. Downs.

ASSISTANT INSPECTOR OF MILK—Fred L. Robertson.

INSPECTOR OF VINEGAR—Stephen C. Downs.

INSPECTOR OF ANIMALS—Harry Lukes.

INSPECTOR OF PETROLEUM—George H. Powers.

SUPERVISOR OF SOLDIERS' AND SAILORS' GRAVES—John C. Condon.

BUILDING COMMISSIONER—Fred W. Lumis.

BUILDING INSPECTORS—Daniel W. Campbell, Leigh Ferry Morgan, Samuel R. Whitney.

PLUMBING INSPECTOR—Frank W. Tower.

ASSISTANT PLUMBING INSPECTOR—Ernest G. Bates.

INSPECTOR OF GAS FITTING—Fred A. Bicknell.

INSPECTOR OF WIRES WITHIN BUILDINGS—Allen W. Hopkins.

ASSISTANT INSPECTORS OF WIRES WITHIN BUILDINGS—John F. Shea, Wilbur Chauncey Field.

INSPECTOR OF ELEVATORS—Wm. F. Schrader.

CLERK OF BUILDING DEPARTMENT—Alice Ferguson.

BOARD OF APPEAL—Frank W. S. King, Thomas J. O'Brien, Daniel W. Mellen.

FISH WARDEN—James P. Hatch.

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WATER COMMISSIONERS—The Mayor, Edwin A. Blodgett, Dr. George L. Fenn.

CHIEF ENGINEER OF WATER WORKS—Elbert E. Lochridge.

SUPERINTENDENT OF WATER WORKS—Howard M. King.

WATER REGISTRAR—Alfred R. Hathaway.

BOARD OF PUBLIC WORKS—Frank G. Tobey, Fordis C. Parker, Napoleon E. Russell.

BOARD OF REGISTRARS OF VOTERS—John W. Nolan, Stephen F. Bible, Warren P. Underwood, Clifford F. Smith, Clerk.

CLERICAL ASSISTANTS—Edith M. Ware, Julia A. M. O'Brien, Ruth B. Payne.

FIRE COMMISSIONERS—Wm. W. Tapley, Charles B. Hitchcock, Edwards O. Davis, Thomas J. Sheridan, John D. Shuart.

ENGINEERS OF THE FIRE DEPARTMENT—Chief, William H. Daggett; Deputy Chief, Everett A. Kimball; District Chiefs, Burton Steere, John R. Graves, Arthur H. Strong, Clarence E. Gesner, Herbert C. Root, Charles S. Taylor; Superintendent of Fire Alarm, Herbert H. Berry; Assistant Superintendent Fire Alarm, John M. Safford.

PARK COMMISSIONERS—Stanhope E. Blunt, Nathan D. Bill, Theodor R. Geisel, Charles Adams, Dwight R. Winter.

PARK SUPERINTENDENT—Charles E. Ladd.

COMMISSIONERS OF SINKING FUNDS—Robert O. Morris, Andrew B. Wallace, A. Willard Damon.

LICENSE COMMISSIONERS—William M. Stevenson, Hugh J. Donnelly, George G. Tait.

POLICE DEPARTMENT.

POLICE COMMITTEE—John J. Lester, Aime H. Cote, Leonard S. Stebbins, Fred H. Clarkson and Eugene J. Sweeney.

CHIEF OF POLICE—William J. Quilty.

DEPUTY CHIEF OF POLICE—Henry M. Perkins.

CAPTAIN OF DETECTIVES—Frank W. Quilty.

CAPTAINS—Martin P. Costello, Charles A. Wade, Edgar A. Littlefield.

DETECTIVE LIEUTENANTS—John St. Ledger, James T. Raiche, James M. Daly, George H. Norris, Daniel F. McCarthy, John A. McNeil, Joseph A. Murphy, Ernest P. Marble, Joseph D. Powers, Patrick J. Fenton, Matthew J. Meade.

LIEUTENANTS—Michael J. O'Brien, Michael Kennedy.

DETECTIVE SERGEANTS—John P. Fleming, George W. Bicknell.

SERGEANTS—Daniel J. Twohig, John L. Maloney, Harley H. Blodgett, John A. Swift, Patrick J. O'Connor, Michael F. Egan, Edwin C. Holbrook, John F. Donoghue, Frederick J. Runnells, John H. Dunleavy, Thomas Moriarty, William J. Hurley, Charles W. Geary.

MATRONS—Mrs. Delia E. Flanagan, Mrs. Katherine Sheehan.

DEPARTMENT CLERK—Anna A. Kelliher.

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POLICE OFFICERS.

Night and Day Watchmen.

Michael C. Quinlivan,
Ward E. Maranville,
Albert H. Shaw,
James J. Donovan,
Patrick Keefe,
Ovila L. Huot,
William J. Grady,
Timothy J. Hallahan,
John F. Bacon,
James F. Dagnan,
Alexander Gray,
Patrick Lynch,
John P. Sullivan,
Llewellyn D. Carey,
William F. Goldrick,
Michael F. Sullivan,
Edward Carey,
Horace G. Clark,
Frederick P. Smith,
George F. Russell,
James H. O'Brien,
Durham N. Pepin,
Clarence E. Bradway,
James J. Collins,
Bernard J. F. Bergren,
Peter H. Walsh,
William S. Bates,
John A. Hamberg,
John A. Driscoll,
Charles Martens,
William J. Hogan,
George E. Lynch,
Michael J. Flannery,
Howard F. Tourtellotte,
Edward J. Slattery,
Michael J. Curley,
Arthur H. Carrigg,
Jeremiah B. O'Leary,
John Hayes,
Patrick J. Keane,
Thomas F. Connery,
Louis H. Pilon,
Eugene F. Kelleher,
James P. Gray,
Thomas L. Kavanaugh,
Mathew P. Ryan,
William F. Lonergan,
James J. Moylan,
John H. St. Ledger,
John B. Carrigg,
Peter J. Mara,
Frederick C. Cullen,
Thomas C. Fleming,
John C. Driscoll,
Cornelius P. Brosnan,
Charles C. Learned,
Michael J. O'Brien,
Lovell S. Spaulding,
John J. Maloney,
Arthur E. Clifford,
Edward D. Pepin,
Fred A. Champous,
Ralph J. Carleton,
John J. Donlin,
Ernest C. LaFleur,
James W. Pease,
Owen C. V. Sloan,
John H. McDonald,
George N. Riley,
John F. Hurley,
Harry R. Button,
Lyman B. Bullock,
Ward C. Maranville,
John J. Crowley,
John P. Driscoll,
Arthur H. Parker,
Thomas F.Murphy,
William F. Edmonds,
George F. Henry, Jr.,
James G. Taylor,
Cornelius F. Dowd,
Daniel J. Long,
Albert J. Tessier,
Thomas F. French,
Frank J. McNeill,
Peter McLelland,
John J. Long,
Philip E. Burke,
Neil Bryson,
Mitchel Frappier,
Ellsworth C. Myers,
Edward F. Cullinan,
Charles J. Murphy,
John P. Cleary,
Louis C. Miller,
Charles G. O'Malley,
Lawrence V. Malone,
Patrick Lovett,
Michael F. Clancy,
Charles M. Feeney,
John Lamondia,
Rolla C. King,
Edward L. Keating,
William J. Wall,
Paul H. Rice,
Patrick M. Hurley,
Patrick H. Meleady,
Edgar P. Tanguay,
Wm. H. Connor,
Harry D. Foley,
John J. Maher,
John W. Harrington,
Percy F. Laming,
Victor M. Tetrault,
Hugh J. Daley,
Alfred H. Penfield,
Charles W. Stetson,
Dennis M. Lynch,
Thomas H. Tuohey,
Charles T. Long,
Daniel W. Spellacy,
Walter C. Eaton,
Lawrence P. Canning,
William C. Sullivan,
Ernest G. Tourtellotte,
Michael O'Connell,
Daniel M. Keyes,
Harold W. Poehler,
Leon A. Maloney,
Thomas C. St. Ledger,
Jeremiah J. Hurley,
William J. Pouliot,
James Moriarty,
Joseph A. Burke,
Christopher J. Aspall,
Lewis H. Aldrich,
William P. Burke,
Newman W. Sherman,

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James E. Fahey,
James J. McMahon,
John E. Sullivan,
Andrew Curran,
William L. Pollock,
Patrick J. Tuttle,
Daniel T. Sullivan,
Thomas O'Connor,
Patrick J. Bowler,
John J. Ford,
Edward J. Connolley,
Daniel J. McDonnell,
Michael J. Fitzgerald,
Maurice McKenna,
Henry C. Butler,
Thomas P. Gaffney,
Harry R. Avery,
Raymond P. Bills,
Andrew H. Boyd,
Joseph E. LeMoine,
James J. Begley,
George Scott,
Thomas F. Sullivan,
Thomas Dowling,
John J. Connor, Jr.,
Farrell J. Fitzpatrick,
Francis J. Kenney,
Patrick Kennedy,
John J. Moriarty,
Lester C. Hammond,
Maurice V. Karlstrom,
James O'Donnell,
John A. Flanagan
Frank LaVoice,
Cecil V. Bassett,
Warren S. Fielding,
Leonard E. Dorsey,
Thomas J. Keating,
James E. Goggin,
Stephen B. Webster,
Alfred L. Brouillet,
Thomas Dunne,
Michael Ashe,
Paul L. Henry,
Thomas Lohan,
Ralph J. Brennan,
Ira E. Klase,
John J. Connelly,
Daniel J. Shea,
William F. Marren,
Michael A. Mitchell,
John J. Flaherty,
James V. Motherway,
John J. Scanlon, Jr.,
Jeremiah F. Dowd,
Daniel J. Sheehan,
John F. Stack,
Michael H. Smith,
John E. Conway,
Patrick J. Howard,
George M. Dunn.

POLICEWOMEN.

Mary F. Lathrop,
H. Elizabeth O'Connor.

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MAYOR'S ADDRESS

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SECOND ANNUAL MESSAGE

Gentlemen of the City Council:

We have been chosen trustees of a great corporation—the City of Springfield. We must spend wisely and get a fair return for the money expended.

It is a real pleasure to welcome those of you who are for the first time taking up the duties of public servants. Although this will demand some sacrifices and personal inconveniences, I am sure you will not regret anything you may do with a sincere desire to serve your city.

We have just concluded a rather strenuous year. The abnormal conditions have not been conducive to general happiness. Much suffering has occurred because of the unemployment situation. Many of our well paid employees have not been patient or content to share in the general decline.

This should be a year of retrenchment in municipal management, as far as it is possible with a rapidly growing city and consequent growth of departmental needs. We are on our way to normal prices and a firmer business basis. Prices of commodities are slowly declining. We must look to heads of departments for efficiency and do our part by careful consideration of all requests that will fall to us for decision.

In preparation of the annual budget the salaries and wages of city employees must be fixed. As prices are either stationary or declining, increases in salary must not be expected. These economic readjustments to normal conditions from a period of great inflation bring to us a problem that is common to the entire country and one that must be met squarely. Our tax rate is now too high. We should strive to decrease it although the many projects to which we are committed, especially in connection with the new bridge and its approaches, will make this a difficult task.

FINANCE.

The City of Springfield does not have a paid-up capital like other business corporations but depends on anticipated revenue collected largely from taxes to meet its annual budget.

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Unfortunately taxes are not all paid when due and Springfield, like all other cities, carries over a large amount of uncollected taxes. Last year the amount of uncollected taxes at the close of the fiscal year was $1,787,815, so that now the city treasurer is obliged to borrow in November against this large amount of uncollected taxes in order to close the fiscal year with all bills paid.

Having no paid-up capital, as stated before, the city is obliged to run almost the entire year on borrowed money payable in November when the taxes come in. Then the notes are paid off and the process begins again for the following year.

Taxes are due in November, and if they had all been paid last November the city would have begun this fiscal year, December 1, with assets of $400,000, cash surplus, and property owned by the city (water works, public buildings, etc.) valued at over $21,000,000, and liabilities consisting of a net indebtedness of $9,760,174.

The surplus of $400,000 at the year's close is computed after all bills for current expenses are paid, and, as no bonds have ever been issued for any purpose that could be construed as current expenses, the city keeps well within its income.

The past year the city borrowed in anticipation of revenue, $4,800,000.

The city has grown to be a large financial corporation distributing annually about $15,000,000, as the following statement of the operations of the treasury for 1921 will show:

Cash Receipts.		*Cash Payments.*	
From Revenue sources	$13,606,175.92	For Revenue purposes, as per Treasury Warrants	$13,854,602.32
From Non-Revenue sources	1,346,892.55	For Non-Revenue purposes as per Treasury Warrants	1,111,634.93
Total receipts	$14,953,068.47	Total payments	$14,966,237.25
Cash and paid vouchers on hand December 1, 1920	864,968.34	Cash and paid vouchers on hand November 30, 1921	851,799.56
	$15,818,036.81		$15,818,036.81

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Springfield's credit has stood the test of high money rates prevailing during the war period with the result that no bonds have been issued with an interest rate above 5%. From 1916 to 1921 inclusive, $5,257,000 bonds were issued and sold at rates ranging from 4% to 5%, the average for the total during this trying period not exceeding 4½%. During the same period $3,491,600 matured and were paid, leaving the present funded debt at $10,716,000, an increase over 1915 of $1,765,400.

Our present debt is issued at an average interest rate of 4.17% per annum and for the following purposes:

Water works (exempt)			$1,637,000
Schoolhouses:			
Technical High School	$432,000		
High School of Commerce	636,000		
Junior High School	790,000		
Other schools	2,104,000		
		$3,962,000	
Dwight and Water streets railroad underpasses (exempt)		628,000	
Dwight-Willow and Hillman streets extensions		28,000	
Dwight street widening and extension (exempt)		1,500,000	
Emery street storehouse (addition)		17,200	
Fire department buildings		70,002	
Fire and police headquarters		153,000	
Fulton street widening		260,000	
Health department hospital		9,000	
Laundry and heating plant, Almshouse		7,898	
Municipal heating plant		39,000	
Municipal group buildings and land (exempt)		1,348,000	
Municipal group land		98,500	
Parks and buildings		162,000	
Sewers		475,500	
Taylor and Stafford streets extensions (exempt)		250,000	
Wayfarers' Lodge		16,000	
Water street widening		54,000	
Debt exclusive of water debt			9,079,000
Total debt			$10,716,000

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The Treasury Department disposed of $1,275,000 4½% and 5% bonds during the past year receiving a premium which reduced the interest basis to 4.63%. The purposes for which bonds were issued are as follows:

Junior High School, State street	$600,000
Dwight and Water streets railroad underpasses (exempt)	200,000
Taylor and Stafford streets extension (exempt)	250,000
Sewer bonds, 1921	225,000
	$1,275,000

The amount of debt the city can incur in 1922, within the statutory limit, is $1,113,331.

The funded debt maturing in 1922 totals $662,500. Of this amount $89,000 is water debt, which will be paid from receipts of the Water Department, $55,000 for which sinking funds are provided, and $518,500 serial bonds for sundry purposes, that will have to be appropriated for and paid from the tax levy.

The following projects will probably require bond issues this year:

Water street widening.
Vernon street widening.
Chestnut street engine house.
Sewers.
Elementary school—Indian Orchard.

A part of the city income comes from the State from taxes on corporations. As last year was very unfavorable for most corporations our income from this source will be very much lessened this year.

Our assessors are making a careful study of a system of valuations on a scientific basis used in other cities which may substantially help us. I wish to commend the faithful work of the assessors, the revenue producing department of our city.

SCHOOLS.

The new Junior High School on State street is now well under way. Four rooms have been remodeled in the old Pynchon street building to relieve the crowded conditions at the Howard and William streets sections.

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The School Board recommends that an elementary school, of not less than twelve rooms, be erected to replace the East Main street building in Indian Orchard. This should be built on the property owned by the city on Myrtle street, thereby relieving the congestion in the Myrtle street building. The Board also reports crowded conditions in the William street school section. Another year or two may require the enlargement of the Technical High School. The present building was planned to accommodate 750 students. The present membership is 905.

The difference of opinion between the School Board and the Mayor and Finance Committee will be settled by the courts. There should be no feelings of malice or animosity on either side. I believe that both sides were sincere and honest in their opinions. The whole question of the annual increments in salary of school teachers must depend upon economic conditions and the financial ability of the city.

FIRE DEPARTMENT.

It is with justifiable pride that we look upon the work and resources of our Fire Department. Both officers and men have shown themselves efficient and have manifested a deep interest in their work.

The city must soon make provision for better fire protection in the extreme southerly section of the city and in East Springfield. Land should be secured now in these sections for such buildings. There is a great need of quarters for repair work. I hope that it will be possible to provide such a building this year.

The question of a new fire station to replace the present Chestnut street building will have to be decided by you very soon and a change in the location of the present central fire station may well receive your attention. The present location on the westerly side of the city, on the new bridge approach, with heavy and increasing traffic, is undesirable in the opinion of our fire chiefs and the fire commission. A more central location might now be secured which could be developed in the future.

POLICE DEPARTMENT.

During the year our Police Department has been brought into an unenviable position because of criticism of some of its members. A probe of this department was believed to be the best way to clear

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the situation and restore confidence in this department against which anonymous letters and much gossip were hurled. A committee of the City Council was finally selected to undertake the investigation. After careful study this committee has been unable to find facts sufficient to condemn the department although reporting certain derelictions of duty common to such a large body of men. I believe, therefore, that public confidence should be restored.

The department's chief and the commission have been hampered by civil service rules, a difficulty which seems to be insurmountable. Any change in form or personnel of the commission will not cure the troubles we have under such a system.

I am convinced that most of our policemen are honest and reliable men, only a few being a discredit to the force. I believe the department will be much improved by the police school to be established soon.

A policeman's duties place him in frequent danger both to life and reputation. They are bound to make enemies and they should have the intelligent sympathy of all lovers of law and order.

STREETS.

The care and upkeep of our streets are important. The condition of our thoroughfares speaks well for the work of our department as compared to other cities. Substantial appropriations were made last year for street work. On account of the unemployment situation much more work than usual was done.

One of the most important street projects which should be undertaken this year is the development of Water and Vernon streets as approaches to the new bridge. The road from the South End bridge to the Longmeadow line should be widened in part and improved throughout. Berkshire avenue and Liberty street also should receive our attention.

Portions of the pavement in Main street will have to be relaid soon.

Whether or not the State and County might share in the expense of building our main arteries of traffic or whether a fee might be levied on all automobiles and trucks owned here rather than an increase of fees by the State, or whether the State might make a return to cities of part of the registration fees collected, are questions which might well be considered during the coming year.

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SEWERS.

There was an unusual amount of sewer work done last year, about double the amount done in any previous year. Nearly nine and one half miles of sewer mains were laid besides two miles of house connections. This work has been neglected so long that it must be carried on vigorously again this year.

Sewers should be built in the Hickory street and Orange street sections and a storm water sewer through Eastern avenue to the Watershops. We shall submit and ask for appropriations to carry on this necessary work.

CITY PLANNING.

To make Springfield a better place to live in is the work of our Planning Commission recreated last year. They are giving much time and thought to this work, having employed the Technical Advisory Corporation of New York and Frederick Law Olmsted to study the whole problem governing the location of public buildings, streets, parks, boulevards, river fronts, railroads, trolly routes, mercantile and manufacturing districts, as well as the plotting of new districts.

They have already done much work along these lines and will make further report and recommendations during this year. This is perhaps the most important work we are doing today for the future welfare and beauty of our city. Let us co-operate with them to the limit of our ability.

PARKS.

Our Park Department have been doing more than the ordinary amount of work during the past year because they have been able to utilize many of the unemployed men to advantage. They have extended the road south of Porter Lake in Forest Park a long distance. During the coming year they will continue to develop the land acquired from the Water Department at Five Mile pond. They hope to still further enlarge the Van Horn Park. Again I wish to commend the good work done by this department in playgrounds and community centers.

ORDINANCES.

The recodification of the city ordinances, which has not been done since 1904, is now completed and in the hands of the printers. We

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owe much to former Alderman Charles A. Allbe and the committee, who have worked so faithfully to complete this arduous task.

SOLDIERS' MEMORIAL.

The heroism of our soldiers and sailors and their great service to humanity has not been forgotten by Springfield.

In times of peace we still need their services.

We expect a permanent memorial to those who died, and a testimony to those who live that we have not forgotten, will be erected. The commission to whom this matter was delegated wisely postponed action on account of the excessive cost of construction.

MISCELLANEOUS.

Another public sanitary is needed at Winchester Square. A building can be installed adjacent to the Buckingham school at a moderate cost and heated from the same boiler. I recommend that this be done.

Many cities have a city flag or emblem. While this matter has been discussed at various times, no action was ever taken to adopt a design. I recommend that a committee be appointed to report to the City Council the advisability of adopting some design for a city flag.

We have an ever increasing parking and traffic problem which will need careful attention, especially when the new bridge and approaches are completed.

The parking of cars close together on busy streets, such as Worthington and Bridge streets, constitutes a grave danger in case of a serious fire in retarding the work of the Fire Department. Both Chief Daggett and Chief Quilty have called attention to this danger several times. Something must be done about it.

The unemployment situation, I am glad to say, does not appear to be growing worse. However, some provision must be made for those unfortunate ones unable to find a means of livelihood. Since last August the city has made special appropriations of from $5,000 to $10,000 per month for the purpose of furnishing work to this class of men. By this means work not immediately necessary has been done by the Park Department and the Street Department. I recommend that we continue to carry on public work sufficient to give employment to those who have been found deserving.

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Springfield is not a cheap place to live in. Municipal expenses are very large. People live here because they love Springfield. They demand much and have always been willing to pay for it.

Springfield leads in all forms of effort which make for the peace, comfort, and happiness of all. We need not apologize for what we have done. Because we are human we make mistakes.

We have faced our problems fearlessly and endeavored to solve them for the best interest of all the people. We must continue to do this.

Hard duties are ahead of us. We shall perform them courageously, with unselfishness, self-sacrifice, and a sense of responsibility to do them at whatever cost for the welfare of our city.

At this time I want to thank all the members of the City Council who served with me last year, for their support and good will throughout the year. I want to thank the members of the Legislature from our city who kept the needs of Springfield constantly before them and did such effective work on the bridge issue.

Springfield is fortunate in having so many public-spirited citizens who love our beautiful city and are willing to give of their time and energy in its service. So I desire to thank all those men, who on committees and unpaid commissions, have served the community so well. The Chamber of Commerce has been of great assistance and Presidents Arthur A. Adams and Col. Walter R. Weiser should receive our special commendation.

I feel deeply the fact that the City Council has had the confidence of the people during the past year. I appreciate the trust placed in me and am humbled by the obligation I feel resting upon me to carry this work another year.

Springfield is a prosperous city, but we must not forget Him from whom come all our help and blessings.

In closing, I ask the co-operation of every one of you, as well as every citizen, to help make Springfield a bigger, better, and more beautiful city.

EDWIN F. LEONARD,
Mayor.

January 2, 1922.

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REPORT

OF THE

SCHOOL BOARD

OF THE

CITY OF SPRINGFIELD, MASSACHUSETTS

1921

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SCHOOL BOARD FOR 1922

EDWIN F. LEONARD, MAYOR,
CHAIRMAN, *ex officio.*

	TERM EXPIRES.
AT LARGE—RALPH W. ELLIS, JR., 39 Mulberry Street. Business Address, 74 Park Street.	Dec. 31, 1924
WARD 1.—FREDERICK A. BASSETTE, 82 Green Lane. Business Address, 53 Hillman Street.	Dec. 31, 1924
WARD 2.—TIMOTHY J. COLLINS, 45 Underwood Street. Business Address, 92 State Street.	Dec. 31, 1924
WARD 3.—CHESTER T. NEAL, 285 Union Street. Business Address, 387 Main Street.	Dec. 31, 1922
WARD 4.—MRS. JEANNE J. STARR, 130 Mulberry Street.	Dec. 31, 1922
WARD 5.—CHARLES H. ANGELL, 11 Ingersoll Grove. Business Address, 500 Main Street.	Dec. 31, 1922
WARD 6.—FRANKLIN A. LATIMER, VICE-CHAIRMAN. 36 Beechwood Avenue. Business Address, 310 Main Street.	Dec. 31, 1923
WARD 7.—GEORGE H. FOSS, 530 Sumner Avenue. Business Address, 10 Chestnut Street.	Dec. 31, 1923
WARD 8.—CHESTER S. McGOWN, 192 Wilbraham Road.	Dec. 31, 1923

SECRETARY,
BERTHA M. McCONKEY,
115 High Street.

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SUPERINTENDENT OF SCHOOLS,
JAMES H. VAN SICKLE,
Administration Building. Office hours: School days, from 12 M. to 1 P. M.; Saturdays, from 10.30 A. M. to 1 P. M.

ASSISTANT SUPERINTENDENT OF SCHOOLS,
ELEMENTARY SCHOOLS AND KINDERGARTENS,
BERTHA M. McCONKEY,
Administration Building. Office hours: School days, from 12 M. to 1 P. M.; Saturdays, from 11 A. M. to 1 P. M.

CHIEF CLERK,
FRED L. WARD,
Administration Building. Office hours: 8.30 A. M. to 5 P. M.; Saturdays, 8.30 A. M. to 1 P. M.

CLERKS,

EDWINA A. MILLER,
CHARLES A. H. PARKER,
ADA B. CLAPP,
ANNA D. GRANT,
A. LEOTA PINNEY,
ANNA F. LEONARD,
FLORENCE J. LYON,
RUBIE M. PERKINS,
MARIE C. HAYES,
MURRAY R. PARKER,
EMILY L. COE.

SUPERINTENDENT OF PUBLIC BUILDINGS,
HIRAM L. DORMAN,
Administration Building. Office hours: 10.30 to 12 M.

CLERKS,
FRANK J. DOWNEY,
CATHERINE E. GOGGIN.

ATTENDANCE OFFICER,
JOHN A. PARKER.

ASSISTANTS,

HARRY A. KILLMER,
LEONARD W. KNIGHT,
HARRY E. HANDY,
EDWIN R. LAMPSHIRE,
Administration Building. Office hour: 12.30 to 1.30 P. M.

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SPECIAL COMMITTEES FOR 1922

Finance—The Mayor, Mr. Latimer, and Mr. Angell.
Text-Books and Supplies—Mr. Latimer, Mrs. Starr, and Dr. McGown.
Central High School—Dr. Foss, Mr. Angell, and Mrs. Starr.
High School of Commerce—Mr. Angell, Mrs. Starr, and Mr. Bassette.
Technical High School—Mr. Neal, Dr. McGown, and Dr. Foss.
Evening Schools—Dr. McGown, Mr. Bassette, and Mr. Collins.
Industrial Schools and Manual Arts—Mr. Angell, Mr. Bassette, and Mr. Ellis.
Kindergartens—Mrs. Starr, Mr. Neal, and Mr. Collins.
Physical Education and Hygiene—Dr. Foss, Dr. McGown, and Mr. Neal.
Music—Dr. McGown, Mr. Collins, and Mr. Ellis.
Home Economics—Mrs. Starr, Dr. Foss, and Mr. Ellis.
New Buildings—Dr. Foss, Mr. Angell, and Mr. Neal.
Salaries—Mr. Latimer, Mrs. Starr, and Mr. Neal.
Ward One Group of Schools—Brightwood, Chestnut street, Glenwood, Jefferson Avenue, and Lincoln—Mr. Bassette.
Ward Two Group of Schools—Armory street, Carew street, Charles street, and Hooker—Mr. Collins.
Ward Three Group of Schools—Howard street, State street, and William street—Mr. Neal.
Ward Four Group of Schools—Alden street, Barrows, Central street, Eastern avenue, School street, and Strickland—Mrs. Starr.
Ward Five Group of Schools—Buckingham, East Union street, Tapley, and Worthington street—Mr. Angell.
Ward Six Group of Schools—Acushnet avenue, Forest Park, and Sumner avenue—Mr. Latimer.
Ward Seven Group of Schools—East Forest Park, Kensington avenue, Washington and White street—Dr. Foss.
Ward Eight Group of Schools—Boston Road, Dry Bridge, East Main street (Indian Orchard), East Springfield, Five Mile Pond, Homer street, Liberty, Myrtle street (Indian Orchard), Rushville Portable, and Sixteen Acres—Dr. McGown.

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ADVISORY COMMITTEE FOR VOCATIONAL SCHOOL

METAL-WORKING DEPARTMENT.

EDWARD S. POMEROY,
Master Mechanic, Smith & Wesson.

CLARENCE W. ALLEN,
Superintendent, Springfield Machine Co.

WOOD-WORKING DEPARTMENT.

A. G. CHAPMAN,
Carpenter-Builder.

C. H. CUTLER,
Foreman, Hampden Lumber Co.

WILLIAM FOSTER,
Sealer of Weights and Measures.

PRINTING DEPARTMENT.

WALTER R. PHILLIPS,
Job Printer.

CHARLES B. PORTER,
Foreman, Printing Department, Springfield Fire & Marine Insurance Co.

WILLIAM M. LESTER,
President and Treasurer, Loring-Axtell Co.

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SCHOOL CALENDAR, 1922

Winter Term begins	January 3, 1922
First Semester ends	January 27, 1922
Second Semester begins	January 30, 1922
Winter Term ends	February 24, 1922
Spring Term begins	March 6, 1922
Spring Term ends	April 28, 1922
Summer Term begins	May 8, 1922
Summer Term ends	June 30, 1922
Fall Term begins	September 5, 1922
Fall Term ends	December 22, 1922

SCHOOL HOLIDAYS

New Year's Day	January 1
Washington's Birthday	February 22
Patriots' Day	April 19
Memorial Day	May 30
Columbus Day	October 12
Thanksgiving	(Thursday and Friday)

SCHOOL SESSIONS

Elementary Schools	8.45-11.45 A. M. 1.30-3.30 P. M.
Junior High Schools	8.30-11.30 A. M. 1.00-3.30 P. M.
State Street Junior High School	1.30-5.30 P. M.
Central High School	8.15 A. M.-1.00 P. M.
High School of Commerce	8.30 A. M.-2.45 P. M.
Technical High School	8.30 A. M.-2.40 P. M.
Vocational School	8.30 A. M.-12 M. 12.30-4 P. M.
Continuation School	8.00 A. M.-12.00 M. 1.00-5.00 P. M.

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ANNUAL REPORT

OF THE

SUPERINTENDENT OF SCHOOLS

To the School Board:—

The enrollment on September 30, 1921, in all day schools, exclusive of the Continuation School, was 21,332, an increase of 532 over that of 1920.

DISTRIBUTION OF ENROLLMENT BY TYPES OF SCHOOLS.

	1920	1921	Increase
Junior College (Freshman year)	28	63	35
Senior High (Grades X–XII)	2,840	2,660	180
Vocational	145	259	114
Junior High (Grades VII–IX)	4,262	4,743	481
Elementary (Grades I–VI)	12,486	12,341	-145
Kindergartens	1,399	1,266	-133
	20,800	21,332	532
Average Membership	20,141	20,677	536
Continuation School	924	380	-544

The marked decrease in attendance at the Continuation School is accompanied, as might be expected, by a correspondingly large increase in the intermediate or junior high school grades. Not being able to secure employment, boys and girls within the compulsory age return to the regular schools.

The reduced enrollment in the kindergartens and elementary schools is due no doubt to the new rule by which the age of entrance has been raised one half year.

SCHOOL ACCOMMODATIONS.

Though no new school buildings have been erected during the year, some minor needs have been met and plans have been put in operation that promise adequate relief in the few localities where overcrowding threatens. The one notable building enterprise initiated during the year is the State Street Junior High School, now actually under construction.

Additional elementary school accommodations are urgently needed in the east Forest Park section, in Indian Orchard, and in the neighborhood of the William Street School. The first-named need is in the way of being met.

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An elementary school of not less than 12 rooms is required to replace the frame building and portable at East Main Street, Indian Orchard. This building will relieve crowded conditions at the Myrtle Street School by retaining children of grades V and VI living east of the railroad tracks who now attend the Myrtle Street School. At present there are 121 such children. Their retention in the elementary school would vacate four rooms in the Myrtle Street School, thus providing adequate relief. To house the pupils now in the six elementary grades of this district would require ten schoolrooms.

Additional accommodations for children in grades I to IV are needed in the William Street and Acushnet Avenue territory. The Acushnet Avenue School cannot well be enlarged. The William Street School is centrally located in the congested territory. An addition of 10 or 12 rooms would afford needed relief. It would seem better to purchase additional ground and enlarge this building than to go elsewhere and purchase ground for a separate school. The William Street playground is now too small and should be enlarged. It will be remembered that it is the congestion in this territory that necessitates use by the school department of a part of the old Pynchon Street building, part of the Howard Street enrollment being crowded out by pressure from these schools to the south.

The enlargement of the Technical High School is the next imperative need. Had it not been for the organization of junior high schools, the city would have been confronted long ago with the necessity of erecting the addition to this school for which plans were adopted some years ago. Conditions are now such as to preclude further delay. The present building was planned to accommodate 750 students. The membership this month is 905. At present some relief is afforded by the use of two rooms in the new Vocational School. This relief seems likely to be withdrawn in the near future on account of the growth of the Vocational School itself. Even now extraordinary and difficult adjustments have to be made.

Scarcely less urgent is the need of additional elementary schoolrooms for the territory north of Carew street served by the Jefferson Avenue School and the Lincoln School. These schools are crowded to the limit. Immediate relief might be had by enlarging either of these schools. Ultimately both should be enlarged. There is ample room for an addition to the Lincoln School on the present lot, but the Jefferson Avenue lot is too small to meet even present needs. This is the only school in the city that has no playground. Additional ground should be purchased.

The Central Street School has not the rooms and equipment essential

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to the proper conduct of junior high school work. Lacking science equipment, its Junior III-A grade is taught at the High School of Commerce. The school has neither gymnasium nor auditorium. It should either be provided with facilities equal to those which the other junior high schools have or grades VII, VIII, and IX should be provided for elsewhere. This school as it stands is suitable for the elementary grades, I–VI. The question which must soon be decided is whether the city should be asked to incur the expense involved in the erection of a gymnasium and an auditorium. The other alternative is to transfer the junior high school pupils and make this an elementary school.

All parts of the Central Street district are within walking distance of one or another of three junior high schools. Upon the completion of the State Street School, the 270 pupils of grades VII–IX in the Central Street School could be divided among the three schools.

The question may arise as to how 270 junior high school pupils of the Central Street School could be accommodated in the three junior high schools mentioned. As originally planned, these schools provide a seat for every pupil, but since at all hours of the day some pupils are in supplementary rooms, shops, auditorium, gymnasium, science rooms, etc., away from the seats in their home room, other pupils during these periods may occupy the seats, provided lockers are installed in which the pupils' belongings may be safeguarded. By incurring the moderate expense of installing lockers in the junior high schools, their capacity would be increased about 20 per cent. They would thus not only be able to accommodate 270 junior high school pupils of the Central Street School, but would provide for the anticipated increase for several years to come.

There are arguments for both these alternatives. The two chief arguments for the transfer of the junior high grades are: (1) a considerable saving in expense; and (2) the better conditions for junior high work in large schools. On the other hand (1) local interest in the school as it is cannot be wholly disregarded; (2) the time will come when Buckingham and Forest Park will be overcrowded. Should relief be provided by retaining grades VII–IX in an enlarged Central Street School, or in a new junior high school, sure to be needed some years hence, further east, for instance on the Rushville site? The future of the Central Street School is a debatable question. It merits the most careful consideration.

Recommendations previously made, calling for the purchase of tenements adjoining the new Hooker School, should not be forgotten. Buildings of this type cost but little, and they serve even better than regular schoolrooms for classes in home economics.

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JUNIOR COLLEGE.

The Junior College now in its third year is evidently meeting a real need in our city. As its advantages have become known, they have been accepted by increasing numbers of students. Junior colleges elsewhere offer two years' work. Thus far we have provided freshman work only. A city like Springfield not having a college of liberal arts within convenient commuting distance, might well offer the full junior college course of two years.

SENIOR HIGH SCHOOLS.

The principal development in the administration of the senior high schools this year has been a clearer definition of the functions of each and the elimination of unnecessary duplication of courses.

In a school system that maintains three high schools, it is difficult to prevent overlapping. Each high school if unchecked tends to magnify its own importance by attempting to do everything every other high school in the system does. This leads to duplication of courses and unwarranted expense.

The cosmopolitan high school maintains all kinds of courses under one roof and under the management of a single principal. This is the type of high school organization which prevails in the West and Middle West. It is also the type of organization recommended by the National Council on Secondary Education in its recent report. That this form of organization is the natural and desirable one is indicated by the tendency in each of our own high schools to become cosmopolitan, to teach everything that any pupil wants to study. Notwithstanding the fact that the cosmopolitan is the more desirable form of organization, we have the other form, and it has been so long in existence, and its three separate plants are so expensive, that change of type is out of the question. It remains to define as closely as may be the function of each school and to limit its courses accordingly.

The High School of Commerce is frankly vocational in that its chief service to the community consists in preparing boys and girls for remunerative work of a special kind immediately upon graduation. However, pupils whose circumstances permit a more extended preparation for business life, may prepare in this school for admission to a college of business administration. They should be encouraged to do so, but the school should not attempt to prepare pupils for entrance into colleges of other types.

In times past, two of our high schools, the Central and the Technical, have undertaken to prepare pupils for entrance into "colleges of liberal

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arts." Now the Central High School specializes in this kind of college preparation, and the Technical, in so far as it offers college preparation, limits its field to the colleges of technology. Its other large function, perhaps its largest one, is to prepare its students to take remunerative positions in industry immediately upon graduation. The general course at the Central High School serves a similar purpose for those pupils who desire immediate employment but not of a specialized kind or who have not yet made tentative choice of a career.

We have abundant evidence that each of our three schools is performing admirably the particular service which the community has a right to expect of it.

THE JUNIOR HIGH SCHOOLS.

In 1920 the attendance in these schools was 5 per cent higher than in 1919. This year the increase over 1920 has been 11½ per cent. One half of this marked increase is no doubt due to economic conditions.

Upon completion of the State Street Junior High School we shall have accommodations adequate for the present enrollment in schools of this type; and by installing lockers so that a seat need not be reserved for each child there is little doubt that the increased enrollment which the next five years will bring can be cared for in existing buildings.

The embarrassment at the State Street School, due to the limitation of its session to four afternoon hours in the Central High School building, is being borne by faculty and students with fortitude. They look forward to the early completion of the new building in which they will have a school home just a little better than any other yet erected in our city for this particular purpose.

There is reason to believe that year by year our junior high schools are making progress in realizing their main purpose, which is to provide a wide range of opportunities for children to test their capacities and abilities and to discover gradually among the various courses offered in advanced grades the particular course best suited to meet their educational and vocational needs.

How shop work may reinforce academic instruction is shown by a sample correlation chart from the Buckingham School:

CORRELATION SLIP

To Teachers of Class.....
In Home Room.....
During Present 10 Weeks the Class
Will Take for Shop. Chart No..... Shop.....
Teachers Are Requested to Confer With Shop Teachers That Room Work May Correlate with Shop Activities.

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CHART OF GRADED ACTIVITIES—BOYS' WORK—BUCKINGHAM SCHOOL SHOP

	11 WOOD	12 METAL	13 PRINTING	14 ELECTRICITY
40 week course I A-B	Board Measure a. Reading Carpenter's Square Squaring to size Sawing to size Planing to size Gauging to size Study of Wood and Grains Rules for Screws and Nails Make Practical Things	Story of Iron and Steel Travel from Mine to Shop Manufacture Use of Machinery Filing and Sawing Making of Angle Irons Draw Pull Trowels Projects	Study of Equipment How Accomplished Lay of Case Setting (straight) Imposition (simple) Press Feeding Estimation (very little) Care of Presses and Rollers	Study Cells—Wet and Dry Magnets—Conductors of Electricity Make Telegraphs CEMENT Study History of Cement Strength, Uses of Make Bulb Tray
	21 WOOD	**22 METAL**	**23 PRINTING**	**24 ELECTRICITY**
40 week course II A-B	Review Board Measure Rules for Screws and Nails Study Saws, Joints, Planing to gauge Lines, Painting, Shellacking Make Practical jobs about the school	Story of Iron and Steel—Cont. Manufacture of Finer Grades Common Uses of Iron and Structure Steel Bicycle Carriers Fireless Cookers Jar Lifters Fireplace Sets	Review Rule Work Job Layout Imposition (2 impressions) Make Ready Designs (Oblong and Margins) Metal Type Clerk Estimating, etc. Tabular Work Printing History	Review Cells, Bells, Lights Make Compass Needle Read Electric Meter Figure Cost of Power CEMENT Study Strength of Mixtures Square and Cubic Measure Make Seat, Bench, Bird Bath, and Flower Boxes
	31 WOOD	**32 METAL**	**33 PRINTING**	**34 ELECTRICITY**
40 week course III A-B	Taboret III B Planing Board to Given Dimensions Adjustment and Use of Marking Gauge and Planes Making mortise and Tenon Joints Wood Finishing	Iron and Steel—Review Work in Steel Inside Calipers Outside Calipers Work in Tin Laying Out and Cutting Soldering Sugar Scoop, Cookie Cutter Funnel	General Review General Work Paper Cutting and Figuring Study of Press (parts, care, etc.) Designs—Linoleum Study of Colors Paper Making Study of Inks Complex Impressions	Study Kinds of Electricity Magnetism—Induction Wiring—Meter Reading Make Small Motor CEMENT Mixtures of Cement—Test Make Molds—Cast Same, Sweep Work Figure Amount Material Needed

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One way in which the boundless energy of pupils of junior high school age may be directed into useful channels is illustrated by the following list of voluntary clubs at the Forest Park School:

1. School Orchestra.
2. School Chorus for Junior II's and Junior III's.
3. School Chorus for Junior I's.
4. Junior Red Cross Club.
5. Well-Dressed Girls' Club.
6. Special Cooking Club.
7. Household Club.
8. Hiking Club.
9. Bicycle Club.
10. Stamp Club.
11. Business Club.
12. Basketry and Raffia Club.
13. Skating Club.
14. Gym. Club.
15. Ski and Snowshoe Club.
16. Banjo-Mandolin Club.
17. Radio Club.
18. Dramatic Scenery Club.
19. Tennis Club.
20. Bicycle Repair Club.
21. Debating Club.
22. Dramatic Club.
23. Nature Club.

Dr. Colin A. Scott's work, described at length in the Annual Report for 1920 under the title, "A Demonstration of Efficiency Methods," is a notable contribution toward realizing the purpose of our junior high schools. Last year his work was limited to the Forest Park School. This year he has given part of his time to the State Street School and has responded to specific calls from two other junior high schools.

With principals and teachers alert to avail themselves of expert advice in pioneer work in this comparatively new junior high school field, Springfield should be able to do its full share in the nation-wide effort to improve the education provided for youth in intermediate grades.

As a help in advising pupils in their choice of courses, the National Intelligence Tests will be given to all VI-A pupils next month. The utility of this means of educational guidance is now so well established, and the tests are so widely used, that their employment in the Springfield schools cannot be regarded in any sense as an experiment. They were given to all Junior I pupils in September.

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SUPERVISION IN THE ELEMENTARY SCHOOLS AND KINDERGARTENS.

Prior to the organization of junior high schools, the first four grades were known as primary grades. These and the kindergartens were the chief supervisory responsibility of the assistant superintendent. Ten years ago there were employed in these grades 205 teachers. Under the present organization all the grades below the seventh are called elementary. For the past six years the supervisory responsibility of the assistant superintendent has included all of these grades. Meanwhile the number of teachers to be supervised has increased from 205 in kindergarten and grades I–IV to 406 in kindergarten and grades I–VI. One supervisor cannot do justice to so large an assignment. The need of assistance in this highly important elementary field has been evident for several years, but not till this year has it been convenient to supply the needed help. Last September Miss Mary O. Pottenger, a highly trained supervisor of successful experience, was secured as supervisor in grades I–III, where she has begun work under circumstances that promise a high degree of success. The elementary grades are the foundation stones upon which the whole educational structure rests. The moderate increase in expenditure for supervision here was absolutely necessary if we are to maintain the well-known high standard of work which our efficient assistant superintendent has established.

Space is lacking to describe at length all activities of the year. Only the briefest possible summary will be attempted. Following the summaries I present in full the reports of the departments of Home Economics and of Manual Arts, these having closed their first full year under the present supervisors; and a brief historical sketch of the Evening School of Trades as it has developed under the able direction of the principal who now retires from its management.

The appointment of Franklin J. Gray as Director of Physical Education marks a new era in the work of that department. The boys' classes in the senior high schools have been without systematic guidance for several years. That the girls' classes have been well looked after, as have both boys and girls in elementary and junior high school classes, may be assumed from Mr. Gray's report of observations made since he came to Springfield on November 1. As his brief statement will doubtless be of interest, I am including it as a part of this report.

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THE VOCATIONAL SCHOOL.

The Vocational School has just completed the most important year in its history. The new building was completed for the school in April. The moving of over one hundred machines, the office equipment and furniture, was accomplished with practically no damage. The enrollment in September, 1920, was 145; in September, 1921, it was 259. There is now a waiting list of about 50 students. It will not be possible to enroll additional pupils until more equipment can be secured.

During the past year there has been an average enrollment of 60 rehabilitation students. The six weeks' summer course which was conducted for rehabilitation students was successful, the enrollment being 103.

All the work for the year has been approved by the State Department of Education, and the city will receive as reimbursement from the State, $13,850.91; from the Federal Government (Smith-Hughes), $2,046.34; Federal Board tuition, $15,645.00; non-resident tuition, $6,172.25.

THE CONTINUATION SCHOOL.

The outstanding feature of the second year of the Continuation School is the consolidation of the boys' and girls' divisions in the remodeled old Hooker School at 95 Main street. The girls (180 in number) are employed by 66 different concerns; the boys (200 in number), by 110 concerns. The boys tend to be employed in small stores. The big factories are not now hiring boys, since they are not running full time. The majority of the girls are employed in the big stores and the half dozen candy companies. Ten girls are doing housework, and several have home permits.

Attention the first year was given particularly to acquiring equipment for the entire building. The machine shop equipment is excellent and the equipment for wood working and printing is very satisfactory.

The particular difference between the Continuation School and the other schools of the city is perhaps most noticeable in the academic class rooms. Here the entire two hours are given over to instruction in work related to the various shops.

In their daily visits to the home and places of employment of the pupils, the teachers have found an increased opportunity to do social welfare work in these present times of distress. The school is quite as much a social welfare agency as it is a school.

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EVENING SCHOOLS AND EVENING SCHOOL EXTENSION.

The efficient work of Mr. Ralph P. Boas and his assistant, Miss Josephine D. Mason, reported in full last year, can only be summarized. The full report covers summer classes in the North End, the South End, and in Indian Orchard; the baths at Howard Street and Hooker schools used by 15,160 persons; industrial classes in factories; elementary evening schools, including the North End Community Center; workhouse classes; and finally the day school for immigrants, till recently at the Continuation School building. Of this class, enrolling more than 80 during the school year, the report says:—

In order to keep in touch with those who have left the class, either to go to work or to go to other classes, an English Club for New Americans has been formed. This club meets once a month and is holding together this splendid group of young immigrants who are themselves exemplifying the best of America,—the spirit of tolerance, the spirit of unselfishness, and the spirit of democracy.

The following statistics will show the enrollment of pupils in the department:—

EVENING SCHOOLS.

Name of School	Enrollment in State-Aided Classes		Compulsory Classes	Totals
Chestnut Street	174		109	283
High School of Commerce	115		23	138
Howard Street	124		110	234
Hooker	180			180
Myrtle Street, Indian Orchard	30	*75	63	168
Totals	623		380	1,003
*Class in Home Problems.				
Day School for Immigrants	33			
Industrial Classes:—				
Indian Orchard Company	42			
Kibbe Brothers Co	26			
Fiberloid Company	50			
American Bosch Magneto Co.	25			
Chapman Valve Mfg. Co.	15			
Total	158			
Women's Classes	55			
Workhouse Classes	20			

Total number attending classes in Department of Evening Schools and Evening School Extension, 1,269.

SCHOOL SAVINGS.

The "Automatic Teller," which has been installed in 24 of our schools by the Springfield Institution for Savings, is popular with teachers and pupils. No device for facilitating thrift is automatic in the sense that it will do the work without the active interest of teachers. In the report

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of the "Institution" we have evidence that interest on the part of our teachers has not been lacking.

The first ten machines were installed on September 15, 1920. Fourteen more were installed in March, 1921. The total deposit to December 30, 1921, is $30,244.99.

THE EVENING HIGH SCHOOL.

The place that the Evening High School fills in the community is clearly shown by the fact that each year over 1,200 persons register for its various classes. The plan of co-operation between the State University Extension Department and the Evening High School, which was inaugurated at the school last year, has worked out very satisfactorily. Many of our pupils have entered state classes for one night per week and are taking the regular school work on the remaining nights.

GARDEN WORK.

It was with regret that the usual work in this field was discontinued. Three school gardens were exceptions to the general rule. These—Kensington Avenue, Homer Street, and Myrtle Street—were maintained through private enterprise, the Hampden County Improvement League co-operating.

ART.

The new course in commercial art at the High School of Commerce is a most valuable one and so popular as to tax our studio facilities. The course aims to teach the principles of advertising, arrangement, lettering, color, figure and object representation, together with their application in commercial design. Posters have received awards and complimentary recognition from the United States Department of Agriculture, the Hampden County Improvement League, and local business houses.

MUSIC.

From the point of view of the public, the outstanding feature in our school music was without doubt the participation in the 'Children's Crusade" at the Music Festival by a large group of pupils from the upper elementary grades and a small number from the first grade of the junior high school. In the opinion of the supervisor it would be greatly to the advantage of the musical growth of the community if there could be

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arranged a yearly co-operation between the school music work and an occasion like the Music Festival.

The year has been noteworthy also in that a beginning has been made in school ownership of orchestral instruments.

PROFESSIONAL ATTITUDE OF THE TEACHING FORCE.

The teachers of Springfield have continued their professional and academic training during the past three years. Approximately two-thirds of them have been enrolled either in university summer school courses, university extension courses, courses organized for junior high school teachers, or in correspondence courses.

A large number of teachers who have not studied in college or university during the past three years have studied privately along two lines: namely, their special interests and education in general.

The teachers should be commended for their activity in increasing their professional equipment during this period of economic unrest and uncertainty. It means not only the maintenance of the past efficiency of the schools, but also an increase in ability to meet more difficult educational problems.

THE EVENING SCHOOL OF TRADES.

This school has had a notable share in the industrial development of Springfield. Under the able principalship of Mr. Charles F. Warner, it was the pioneer among schools of this type supported at public expense. Owing to the increasing pressure of his duties as principal of the Technical High School, Mr. Warner decided this fall that it was best for him to give up evening work. Before doing so, however, he saw to it that the winter's work was well organized and the new course in electrical engineering was fully worked out. During the first week of December he was succeeded by Burton A. Adams.

This school has been so notable a contribution to the life of our city and to industrial education generally through the indefatigable efforts of its principal, that at this time when Mr. Warner is passing on to his successor the responsibility for its further development, it seems fitting that a brief historical account of his achievement should be here given.

Respectfully submitted,

JAMES H. VAN SICKLE,
Superintendent of Schools.

December 30, 1921.

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EVENING SCHOOL OF TRADES

HISTORICAL SKETCH

The Evening School of Trades was organized in the fall of 1898, immediately after the opening of the Technical High School, then designated as the Mechanic Arts High School. One practical reason for its establishment was found in the fact that the city, to provide for the new high school, had leased the building and acquired the mechanical equipment of the Industrial Institute, a private institution which had been discontinued. It seemed best to the authorities to make as much use as possible of this equipment. Furthermore the Industrial Institute had maintained an evening trade school in this building for two or three years, so that the opportunity for continuing this work under city auspices naturally presented itself. For some years, too, progressive educators had been endeavoring to convince the public that there was need of developing public education along trade training lines. At that time there were only a few trade schools in the country, and they were privately supported. The most successful of these, and the first one to be established, was the New York Trade School, founded in 1881 by Richard T. Auchmuty. There were, however, a number of apprentice schools maintained by several large manufacturing firms.

The Springfield Evening School of Trades, therefore, was the first public trade school to be opened in Massachusetts, and not only that but the first of its kind in the United States. This fact has often been commented upon. The Douglas Commission on Industrial Education, in its report of 1906 (see page 13), pointed out the fact that Springfield in this school made the first effort of any community in Massachusetts to teach trades at public expense, although the law authorizing public industrial schools was placed upon the statute books in 1872. In further comment on this fact the Commission, while admitting that the law was in advance of public sentiment, testified to the progressive educational ideals for which Springfield has long been noted. The Commission paid a further compliment to Springfield by including in their report (Appendix No. 4, p. 178) a letter of eighteen pages from the principal of the Evening Trade School.

When the Commission's report was issued the local papers published editorials reviewing the report and calling attention to the advanced position that Springfield had taken in trade and industrial education. It

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thus appears that the Springfield Evening Trade School in its earliest days did pioneer work which had its influence upon public opinion, concerning a field of education the importance of which has revealed itself more and more in later developments.

As in all pioneer efforts, an extraordinary amount of labor was required of the principal and of his helpers. But with all this he had the most cordial support of the School Board and of Dr. Balliet, who was then Superintendent. A large number of exhibits were set up, not only locally but in other parts of the state and even outside of the state, showing the work, however, not only of the Trade School but of the Technical High School. One of these exhibits was sent to Buffalo, where the principal was called upon to give an address to the Liberal Club, all for the purpose of developing public opinion in that city in favor of a large and well-equipped building for industrial education. There is every reason to believe that Buffalo profited by the example of Springfield. When the National Society for the Promotion of Industrial Education was organized in 1906 the principal of the Springfield institution was made a member of the Board of Managers for a term of three years. In connection with the work of this Association the Evening Trade School sent the chief exhibit to an industrial education convention at Atlanta, Ga., which made a great impression. The School Board appropriated a considerable sum of money, and the exhibit itself required thirty large packing cases. I have never seen at any convention an exhibit of this kind of work that would equal in variety and excellence the work shown at Atlanta.

It will appear from what has been said, without referring to several other instances of like nature, that the Evening Trade School during this period was an influential experiment station, so to speak, for the trying out of and giving publicity to what was then a comparatively new field of public education. The work of the Douglas Commission on Industrial Education, already referred to, resulted finally in the establishment of the state-aided vocational schools. The educational department of Springfield cannot, of course, claim all the credit for this movement, but it is doubtful if our citizens of today appreciate the full credit which was due and which was actually accorded to Springfield and its Evening Trade School (and the Technical High School) for the special advice called for and given, and for the inspiration derived from its success in maintaining trade training at public expense.

If you wish to consider the objectives kept in view in carrying on the Evening Trade School, it is correct to say that the chief purpose of this school has always been to offer to men already employed in the local

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trades or industries an opportunity for improvement in the line of work which their occupations call for. Plumbers, machinists, woodworkers, and draftsmen, who have had limited opportunities to perfect themselves in their calling, have found in this school a chance to secure the needed instruction both in principles and in practice. In a word, the school was called at that time by many an industrial continuation school; of course, this term has lately been given a different significance under the recent continuation school law. But the constant aim of the Trade School has always been quite definite, with such variations as were naturally called for by the nature of its organization. I mean by that that it was more or less the product of the combination of several lines of industrial training which already existed in an independent way in 1898. The oldest of these classes was a class in mechanical and architectural drawing which was organized in 1870, one or two years before the state law authorized such teaching. The other classes, as already stated, were privately conducted by the Industrial Institute. The general aim of the classes in drawing has always been broad, viz., to furnish instruction in drawing that should be useful in other callings, not primarily to train draftsmen. A still broader purpose has inspired some of our newer classes that have been associated with the Evening School of Trades, viz., the classes in shop mathematics, freehand drawing, design-crafts, millinery, dressmaking, and cooking. The instruction in these classes, while not losing sight of the practical usefulness in the industries and in the home, assumes the possibility of very wide applications of the principles and methods taught. Quite different, on the other hand, is the character of the instruction in machine shop practice, pattern making, and plumbing. These classes are, strictly speaking, devoted to the teaching of definite trades.

After twenty-three years of successful operation, with a total enrollment during that time of 12,116, the usefulness of the Evening School of Trades to the industries of Springfield and neighboring communities would seem to need no further demonstration. If proof be needed it may readily be found in the high words of commendation which have been spoken by the managers of scores of industrial establishments, and by the experience of more than seven thousand mechanics whose technical efficiency has been increased through instruction in this school, so that they have received a higher classification in their trades. A considerable number of men report every year an increased earning capacity which is directly attributable to the instruction which they have received here. It should be noted, too, that this increased efficiency on the part of the workmen is due not wholly to increased skill in one line of work, though that is an important gain. This school gives them an opportunity to get a more

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extensive and varied knowledge of their trade than they would be able to acquire in many years of employment in the highly specialized modern shops. In this way the industrial intelligence of machinists, plumbers, and woodworkers who take these courses is greatly increased. Too much emphasis cannot be given to this view of the work of a well-equipped school.

The new engineering course now authorized and put in operation in the Evening School of Trades has already been referred to. This new development, I believe, is a logical one in view of developments in industrial education which, as has been indicated, have resulted from the development of public opinion on the subject of trade and industrial training. The first feeling of need among the workers was for more skill; and that is being given them now in various ways, not only in the Evening Trade School but in other institutions. There has of late developed an appreciation, due very largely, I believe, to the work of our courses in mathematics and science at the Evening Trade School, of the even greater need of knowledge of *principles*, connected not only with the division of the trade the worker may be following but also with all the divisions of the trade, broadly considered, and even with other associated trades, i. e., with what we have chosen to call, for want of better term, the engineering features of industry. To advocate this change in the aims of the Evening School of Trades is not to criticize its past; it is rather to show that its aims have been vitalized by the needs of the time. If these needs have not changed much, the appreciation of what the needs really are has broadened, and that means that the institutions should change with an enlarged vision. The educational policy of the Trade School in the next few years should develop along these broader lines.

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EVENING SCHOOL OF TRADES.

Year	Mech. Draw'g	Mach. Shop	Plumbing	Woodwork	Electricity	Mathematics	Blue Print	Automobile	Sheet Metal	Cooking	Applied Design	Dressmaking	Millinery	Freeh'd Draw'g	Totals
1898–99	*123	33	28	..	..	..	..	..	..	..	..	..	..	*95	61
1899–00	*147	32	19	..	..	..	..	..	..	..	..	..	..	*73	51
1900–01	102	39	21	12	..	..	..	..	..	..	..	..	..	*98	174
1901–02	106	102	23	27	49	30	..	..	..	..	..	..	..	*108	337
1902–03	123	101	18	21	32	22	..	..	..	..	..	..	..	*129	317
1903–04	123	99	19	20	25	37	..	..	..	..	..	..	..	*162	328
1904–05	125	99	14	19	11	30	..	..	..	..	..	..	..	*122	298
1905–06	96	81	36	15	20	21	..	..	..	..	..	..	..	*120	269
1906–07	111	123	41	22	36	29	..	..	..	..	..	..	..	*101	362
1907–08	162	118	30	18	35	33	..	..	..	..	..	..	..	*94	396
1908–09	133	96	33	27	38	43	..	..	..	19	32	21	..	*99	447
1909–10	138	119	46	24	38	40	..	..	..	32	39	40	..	39	555
1910–11	133	111	45	22	36	42	..	..	..	14	21	57	..	44	525
1911–12	172	123	37	21	31	45	..	..	..	8	15	57	..	40	549
1912–13	185	141	31	34	34	59	..	..	..	30	28	52	18	49	661
1913–14	161	146	41	25	63	60	..	..	..	39	11	81	27	43	697
1914–15	136	109	25	22	44	41	..	..	..	36	18	113	35	..	569
1915–16	216	198	25	22	61	71	..	..	..	25	16	113	20	..	767
1916–17	288	262	12	30	65	103	..	..	..	54	20	121	23	..	983
1917–18	199	242	19	22	74	60	81	(Radio 81)		17	23	104	30	..	†952
1918–19	180	168	11	11	44	56	57	..	12	28	12	62	26	..	667
1919–20	202	204	22	23	104	58	73	102	..	38	16	171	56	..	1,069
1920–21	146	160	22	32	102	79	57	146	9	45	32	182	60	..	1,082
	3,247	2,906	618	469	942	959	268	248	21 (81)	385	283	1,174	300	215	12,116

*The line shows the time when these courses were affiliated with the Evening School of Trades.
†Includes a course in Radio and Buzzer Work, carried on during the war and numbering 81.
There are 39 teachers on Evening Trade School faculty at present.

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REPORT

OF

DEPARTMENT OF HOME ECONOMICS

SUBMITTED BY AGNES HOUSTON CRAIG, SUPERVISOR.

In the report for 1920, a brief statement summarizes the initial work of the new supervisor of home economics. Prior to April 15 of that year, work in the fifth and sixth grades and the junior high schools has been supervised for one year by a home economics specialist. The high schools had been organized as independent units. Now that all types of home economics have been unified under the direction of one supervisor, the department has so far developed as follows:—

1. It has aimed to improve courses of study, to standardize and supply supplementary equipment, to study the qualifications of teachers with a view to better assignments, and to improve the spirit of co-operation among the home economics teachers themselves.

2. To give school children a clearer understanding of the meaning, scope, and importance of home economics so as to stimulate a normal interest in it; to invite, on the basis of merit, a better understanding and co-operation from parents, to use to better advantage all fundamental work done in other school departments; and gradually to secure the active and continuous co-operation from such special departments as those of physical education, manual arts, nature study, fine arts, physics, and chemistry.

COURSES OF STUDY.

Last year, through the thoughtful work of several committees of home economics teachers, the courses of study for the fifth and sixth grades and the junior high schools were carefully revised. The subject-matter was simplified, more logically arranged, supplemented where necessary, and emphasis was placed on fundamental principles. A reasonable variety of problems was chosen to meet the general need as well as the special needs existing in individual schools. It was thought best to concentrate on fewer actual things and to teach more thoroughly such subject-matter as would be practical and useful. An attempt was made to strengthen

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the work by closer correlation with other departments. So far this policy has been successful with the fine arts department and with the nature study work. Mr. Newell has assisted in planning certain co-operative problems, and Miss Stebbins has met with the home economics group and discussed with them points of common interest that can be used to advantage by both departments. In another section an important type of correlation between the physical education department and the home economics department has been indicated. This year is a try-out year for critical study of the revised courses. Each teacher is preparing herself to make constructive suggestions for further improvement. Toward the end of the year it is planned to publish a syllabus of these courses. For the present they are available in mimeographed form.

The course of study in the Technical High School has received special attention. In the first place, the enrollment of home economics students there is more than three times as large as that of last year. The course has not been extended by the addition of more time, but rather by very greatly vitalizing the work already provided for. It is the aim of the present teaching corps to raise the standard of work in conformity to the level of real technology high school training. To make this possible, through unification, Miss Mabel M. Lutes, who for some years has proved her scholarship and executive ability by developing exceptionally strong courses in foods and nutrition, has been made head of the department. In addition, we have secured the services of Miss Sadie J. Swenson, an expert in textiles and clothing. Miss Swenson has had a wide experience in developing this type of work educationally, and combines with it an exceptional training in art and technology that will make her valuable in this particular work.

In addition, the practice house, taken over for military purposes during the war, has been reclaimed and is being repaired for practical laboratory work in home management. Responsibility for this work is placed on the present senior girls, and up to date it is showing satisfactory progress. The house will soon be ready for occupancy and will contribute greatly to the interest and quality of work done in this department.

In the Forest Park, Myrtle Street, and Central Street schools we are experimenting with home furnishing and home management projects on a small scale. It has been found that these projects tend to stimulate the interest of the students.

EQUIPMENT.

Some of the schools were not adequately equipped, especially in the matter of such essentials as sewing machines. In supplying needed equip-

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ment, it seemed advisable to purchase on a minimum basis. Special attention has been given to equipping the new class rooms at Forest Park, at the Wight house at Indian Orchard, and at the Central Street School. Since the electric motor is becoming such an indispensable feature in the equipment of the home, a small beginning in power equipment has been made by installing three motors in the sewing rooms of the Technical High School and a power hemstitcher for training in technical vocational shop work.

TEACHER TRAINING.

Very early it appeared desirable to adopt a definite minimum standard of training for teachers. The following was adopted:—

1. A full year of home economics of college grade, including work in foods, covering purchase, preparation, preservation, and nutritive values; textiles and clothing, including purchase and care of clothes, sewing, dressmaking, and millinery.
2. Thorough courses, each equal to a credit of three semester hours of college grade in chemistry and art, covering design, color study, or applied design.
3. At least one month of intensive experience in a home practice house of definite experience in the running of a real home.
4. At least three years of successful experience as a teacher of home economics.

This standard is now being put into operation where new teachers are employed. In addition, it is recommended that within a reasonable time teachers already in the schools whose training does not meet with these requirements shall take additional study, to the end that minimum requirements may be met as soon as possible. While in 1920, 36 per cent of the home economics teachers had college degrees, in 1921, 53½ per cent have either the B.S. or B.A. degree. During the summer 36 per cent of the teaching staff attended summer school or secured leave of absence with a view to advanced study during the present semester. It appears that Springfield is fortunate in having a group of teachers with high professional spirit, who are interested in keeping up with the trend of their special work.

HOME ECONOMICS IN THE CONTINUATION SCHOOL.

In this school home economics plays a twofold part: first, in teaching girls how to use moderate finances in supplying to the best advantage their average needs in foods, housing, and clothes, and in the management of daily personal affairs; second, in teaching them how to develop

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some special phase of work in such a way as to make it bring practical economic returns. For example, each girl is taught how to select material, make up, wear, and care for standard garments. Where any girl shows aptitude or preference for a specialized phase of this work, like sewing, machine operation, finishing processes in garment making, or salesmanship in fabrics and clothing, she is taught how to train this talent so that she can use it in industry or in a trade. In connection with this work, valuable assistance has been rendered by the Art and Science museums and by various factory and retail store managers who have made possible special class studies, observations, and demonstrations.

HOME ECONOMICS IN THE JUNIOR COLLEGE.

For the first time home economics courses are a recognized part of the Junior College curriculum. A three-hour credit course in textiles has been adopted and is now being given by Miss Swenson. In view of the very important place now being given to education in nutrition, the supervisor will recommend that a three-hour credit course in nutrition shall be included in the Junior College next year.

SCHOOL LUNCHES.

The importance of the school lunch problem is looming large. On October 5, a lunchroom was opened in the Myrtle Street School, the Woman's Club of Indian Orchard co-operating. There is an urgent demand in other schools for similar service. The multiplication of demand to meet a fundamental and growing need has led the supervisor of home economics to make the following recommendations:—

Because of the importance of food in promoting and maintaining health, it seems highly desirable that the two departments, namely, Physical Education and Home Economics, which have for their object primarily the health of children, should work out a plan together. This plan should embrace the following phases of health work in the schools:—

1. A program that will actually result in the formation of health habits. At the present time there is no satisfactory program.
2. Periodical survey of all the children, using government standard weight charts to determine nutrition requirements and type of instruction.
3. As permanent nutritional values can best be obtained through education, it is recommended that the home economics department have charge of the teaching and directing of all nutrition phases of school work.

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This would include instruction for all boys and girls in the public schools, special direction of open-air school lunches, and supervision of all school lunches.

The home economics department has within its group of twenty-eight teachers, sixteen who have had major training in food and nutrition. Of these sixteen, nine have college degrees with a scientific major in nutrition. With this advantage in specially trained teachers, the nutrition phase of health education should be made very valuable and should operate from the kindergarten throughout all school grades. Furthermore, by means of such a program it would be possible to obtain better co-operation from parents. The results would be far-reaching in the general improvement of health and in reducing the need for so much emergency philanthropy within the community.

HOME ECONOMICS IN THE EVENING SCHOOLS.

Evening school classes in home economics have flourished from the very beginning. During 1920 the services of ten teachers were required: one at Myrtle Street, one at St. John's Parish, two at Hooker School, and six at Technical High School. The work included sewing, dressmaking, cooking, nutrition, millinery, handicrafts. This year (1921) finds a group of twenty teachers: one at St. John's Parish, two at Hooker School, three at Myrtle Street, and sixteen at Technical High School. The work includes cooking, nutrition, textiles, sewing, dressmaking, millinery, and home problems.

The work at the Evening Trades School is developing so rapidly that the adoption of a systematic and progressive course of study to cover three years, and which shall lead to some kind of scholastic recognition, is recommended. For the first time this school has been able to offer a practical course in textiles which is attended by several saleswomen as well as homemakers.

CO-OPERATION.

A trying problem in sewing, dressmaking, and millinery classes is the difficulty of securing from pupils material for class work. The expense is a factor and applies just now to out-of-work families. At the same time, the city cannot furnish such materials. The department has arranged with the Union Relief Association to make up certain types of garments from materials supplied by that organization. So far the plan is satisfactory.

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The department receives hearty and helpful co-operation from leading stores. This assistance is particularly valuable in textiles and all kinds of clothing work, home furnishing, and household equipment, because it makes available valuable loans of illustrative material, certain kinds of samples, and practical information, otherwise unobtainable.

Through its Home Bureau and Children's Achievement Bureau, the Eastern States League also furnishes us with much good illustrative material, supplements our own class room work by excellent club work activities in millinery, handicrafts, etc. There is also helpful co-operation between their special workers and the home economics teachers.

The women's clubs are also co-operating. At present they are interested in creating public interest in nutrition, textiles, and clothing education, and in improving home interests that should invite whole-hearted support from parents. Other agencies, such as the Art and Science museums, are also active in service.

EXPANSION.

This year there is a marked increase of interest in home economics classes. In the grades the children are enthusiastic in their work. In several of the junior high schools the enrollment has made it necessary to appoint additional teachers, as at Forest Park where last year there were two full time and one half time teachers, this year the classes require three full time teachers. Even with this increase, their schedules are too heavy. The Technical High School has increased its home economics enrollment to three times that of last year, and the evening school classes require just double the teaching staff of last year.

As previously stated, a lunchroom has been established at Myrtle Street. There is a prospect of opening two additional lunchrooms in the near future, one at White Street and one at Chestnut Street.

The addition of textiles in the Technical High School and in the Junior College marks a new feature in subject-matter.

The acquisition of the Wight house at the Myrtle Street School furnishes almost ideal conditions for project work in home economics, and also supplies much needed space for overflow classes. The restoration of the practice house at the Technical High School is favorable to better work there.

FUTURE PLANS.

1. To cultivate more completely all co-operating agencies, both within the schools and in the city.

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2. To improve class work, retain and secure the best type of teachers, and to constantly build for better interest of the work between the schools and the homes.

3. To develop more systematic night school work.

4. To develop and make valuable instruction in nutrition as our contribution to a better health progress. With the physical education department co-operating, this will be entirely practical. This work should benefit the open-air schools, the regular lunchrooms, and should tend to extend right food habits into the homes.

5. To develop the work at the Technical High School to a higher standard of general training leading into technology courses of the best type so that girls may be adequately fitted to meet the average problems of everyday living, and also to use their special training in vocational practice.

6. The reestablishment of service courses in the Central High School and the High School of Commerce that will be in harmony with the needs of the student body of each school.

7. To develop a more far-reaching lunchroom policy.

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REPORT OF BURTON A. ADAMS

SUPERVISOR OF MANUAL ARTS

It is difficult to select outstanding features to point to as accomplishments, but I feel that during the past two years three main results have been accomplished, viz.: (1) The co-ordination of effort in all the schools under my supervision without friction with teachers or principals; (2) the keeping down of expense without loss of efficiency; (3) an emphasized and required adherence to the general scheme of work without discouraging initiative and independence in the details of its application.

I would like to call your attention to the possible desirability of giving the manual training men a definite place in the salary schedule. We have been obliged in the past to fix the salaries largely in competition with the industries. That does not obtain at present, but I think it would be disastrous if we should merely consider these men as mechanics and not consider them as teachers and entitled to recognition of their teaching accomplishments, increased ability, and their effort to improve themselves along professional lines. Their classification somewhere in the salary schedule would do a great deal toward improving their morale. All of them have been well trained technically in the subjects which they teach. Most of them have had specific teacher training, and with a number of individuals this has been very thorough. It would be hardly fair, in placing them on the schedule, to make the qualifications for their advance the same as those for academic teachers, but extra work along their particular lines should be given the credit that academic accomplishment is given to other junior high school teachers.

In regard to economy of operation it is difficult to express this in exact figures, but the situation that I found was this: Some of the manual training centers were completely and thoroughly equipped; others were equipped with certain items and lacking in others. I have endeavored to bring every shop up to the same standard, with no tools or equipment lacking that are really needed and none added that were not a necessity. I have been assisted in accomplishing this by my supervision of the senior high school work, and I have been able to switch small items of equipment from school to school and obviate purchases that would otherwise have been necessary.

For the coming year I do not anticipate any large requests for equipment, although the maintenance and replacement of small equipment will continue to be a sizable item, due to a fair wear and tear in use.

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The following figures may be of interest as a matter of comparison of expenditures, bearing in mind that I had nothing to do with the 1919 figures:—

	1919	1920	1921
Supplies, materials, etc.,	$7,627.81	$7,575.08	$5,980.72
Maintenance and repair of equipment,	122.75	182.37	136.27
Replacement of equipment,	682.22	1,054.10	821.10
New equipment,	1,533.74	1,694.33	1,013.49
Totals,	$9,966.52	$10,505.88	$7,951.58

It will be noted that the expenditure for 1920 was $539.36 more than that of the previous year. In explanation of these figures I would state that the year 1920 was characterized by widely soaring prices on practically everything covered by the above expenditures; and in addition to the amount expended for the manual training department several hundred dollars was expended for materials and supplies for the various general auxiliary classes in the city, for which funds had not been otherwise provided.

The figures for 1921 show a decrease of $2,554.30. The classes have not been stinted in any way for materials or supplies, and considerable sums have been spent for the benefit of the general auxiliary classes.

There is one outstanding feature of the junior high school work that needs comment, viz., the so-called practical arts course. With the theory underlying it I have the fullest sympathy, but I have found a great many practical difficulties in carrying it out completely. It requires, first, a thorough understanding on the part of both the shop and the academic teacher; second, co-operation between the two, which in turn presupposes ample opportunity for the academic teacher to visit the shops and the shop teacher to visit the class room. This last co-operation is very difficult to arrange. The ignorance of the class-room teacher of the points involved in the shop work prevents her from asking intelligent questions and causes her to lose sight of many opportunities of correlation.

A successful scheme of correlation is being carried out in the Central Street School in a comparatively small junior high school group, and a like scheme, modified to fit the program of a larger school, is evidenced at Buckingham. To the extent to which it is successful at Buckingham it can be made successful in any other junior high school, provided the practical arts classes are segregated within the school. There are some serious objections to this policy of segregation, but it has other and offsetting advantages, and the evils to a large extent can be eliminated by careful management. I might add that the experience of the Washington Junior High School of Rochester has been similar to the experience we have had in Springfield, and they have found it exceedingly difficult to accomplish the proper correlation when large groups are involved.

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REPORT OF FRANKLIN J. GRAY

DIRECTOR OF PHYSICAL EDUCATION

At your request, I am giving a brief report outlining some impressions and needs of the Springfield Public Schools. This report in no sense represents a thorough study, as the writer has been connected with the schools only a short time.

I have visited all of the schools and most of the rooms in the elementary schools and have been encouraged and inspired by what I have seen. The big outstanding and lasting impression is the one made by the uniform and unusually fine spirit shown in their work by teachers, principals, and children. In room after room I found an earnest, enthusiastic teacher and a happy, interested, and purposeful group of children. This with rare exception is what any one will find upon visitation of the Springfield schools. This spirit has an important and direct bearing on the health of our children. All realize that children who are happy, interested, and achieving in an atmosphere of friendly co-operation with the teachers are progressing in health in a measure impossible under conditions where they are surrounded by a spirit of tenseness, irritation, and unhappiness. This fine and uniform spirit is making a big and direct contribution to the health of our children and should be so understood.

The attitude of the teachers toward physical education is enthusiastic. The present high type of work could only be secured through the combination of good teachers and strong leadership. Mrs. Grace W. Baxter, as supervisor of the work in the elementary schools and director of the girls' work in the higher schools, is entitled to great credit for existing conditions.

Many of the schools are serving milk in a most effective way. There is ample proof that the serving of milk in school is a beneficial health measure.

Some urgent needs may be grouped under the general head of *Facilities*. It strikes one as unusual that a city of Springfield's standing has no swimming pools in connection with its public schools. Swimming is a most useful and beneficial exercise and every child at some time during his school days should learn the art and enjoy its benefits.

One of the fundamental problems of the day is how to give a city-bred and city-cramped youth vigorous exercise out of doors. Springfield is in urgent need of several regional playgrounds adjacent to its schools, particularly those schools located in the congested parts of the city.

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In view of the probable future growth of Springfield, and in view of the present inadequacy of its playground space, I regard the securing of this space as a big outstanding need.

The Central Street Junior High School is in urgent need of gymnasium facilities.

The plan that considers the retaining of the present gymnasium in Technical High School, to be used later for girls, should be reconsidered. Because of its poor light and ventilation this gymnasium is not a good place for exercise.

The children of the fifth and sixth grades, who now have an outdoor recess in the forenoon only, should also have an opportunity for an afternoon recess.

Where bathing facilities exist in the junior and senior schools, there should be two 80-minute periods per week assigned to physical education.

A program of instruction and practice with the primary purpose of getting children to form enduring health habits should be developed by the Nature Study, Home Economics, and Physical Education departments.

Establish a means of measuring progress in physical growth and ability. The proposed weight survey is a step in this direction.

Springfield has a combination of factors that gives it the opportunity to develop a most effective program of physical education.

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ANNUAL REPORT

OF THE

ATTENDANCE OFFICER

To the School Board:—

I have the honor to present herewith the report of the work of the Attendance Officers for the school year 1920–1921:—

Number of visits to school buildings,	2,333
Number of cases reported from schools,	11,201
As follows: for absence, 9,089; truancy, 1,406; tardiness, 399; school offenders, 54; evening school pupils, 253.	
Number of children found about the streets,	904
Upon investigation it was found that 646 were absentees; 189 were truants; 5 were school offenders; 64 were non-attendants.	
Of the children found about the streets, 81 absentees, 11 truants, 1 school offender, 14 non-attendants, 1 newsboy, were taken to their homes; and 46 absentees, 118 truants, 1 non-attendant, 2 newsboys, were taken to school.	
Number of visits made to homes,	13,530
Divided as follows: for absentees, 10,517; census, 385; truants, 1,771; tardiness, 289; school offenders, 47; non-attendants, 137; newsboys, 27; evening school pupils, 357.	
Number of individual absentees investigated,	6,683
Heads of families warned by letter that they would be prosecuted unless their children were sent to school regularly,	60
Persons warned by letter for harboring an unlawful absentee from school,	1
Prosecutions for failure to cause children to attend school,	16
Number of habitual absentees prosecuted,	2
Number of pupils truant,	974
Number of truancies,	1,828
Number of days of truancy,	1,840
Number prosecuted as habitual truants,	37
Number placed on probation,	27
Number committed to the Training School,	10
In addition to the boys committed to the Hampden County Training School, four boys who were on parole had their paroles revoked and were returned.	

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Number of school offenders prosecuted,	6
Number of school offenders committed to the Hampden County Training School,	4
Number of children not attending any school,	145
Of these 50 were reported, and 95 were discovered by the Attendance Officers.	
These cases were disposed of as follows:—	
120 entered school; 4 were sick and physicians' certificates were received; 17 left town; 3 obtained employment certificates; 1 was feeble-minded.	
Number of boys licensed for street trades during the year,	138
Prosecutions for violation of the street trades law,	1
Minors warned by letter for not attending evening school,	1
Number of evening school pupils prosecuted for not attending evening school regularly,	3
Number of individual children whose names appeared on the Attendance Officers' records for the year,	7,603
Number of visits to stores and factories,	126
Number of visits to moving picture houses and theaters,	7
Number of visits to hotels,	1
Number of minors found illegally employed,	99
Number of certificates issued during the past year,	6,990
Employment certificates	1,971
Educational certificates,	4,729
Educational certificates (illiterate),	290
Minors warned by letter concerning the alteration of an employment certificate,	1
Firms and persons warned by letter for employing minors illegally and failing to return certificates,	14
Prosecutions against persons for not returning certificates as required by law,	1
A penalty of five dollars was imposed.	
Minors warned by letter for not attending continuation school,	1
Certificates revoked because of failure of minors to attend continuation school,	2
Cases referred to the Union Relief Association,	15
Cases referred to the Health Department,	4
Cases referred to the Department of Charities,	3
Cases referred to the Children's Aid Association,	1
Cases referred to the Child Welfare Association,	1
Cases referred to the Visiting Teacher,	2
Cases referred to the Woman Probation Officer,	1
Cases referred to the School Nurses,	23
Cases referred to the Immigration Department,	1
Cases referred to the State Board of Labor and Industries,	97
Cases referred to the Society for the Prevention of Cruelty to Children,	14

The unemployment situation has caused a decrease from 11,953 last year to 6,990 this year in the number of educational and employment

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certificates issued. For some time we have kept a chart showing the number of children between fourteen and sixteen years of age leaving school each month to engage in employment as indicated by initial employment certificates. This chart, a copy of which forms a part of this report, also shows a large decrease in the number of children leaving school for work. It has revealed the interesting fact that the month when the largest number of children leave school for employment each year is September. This would lead to the inference that much of the employment of children under sixteen is not an economic necessity for the families concerned. If it was, one would expect to find the largest number securing employment certificates in June or July at the close of the school year, instead of at the beginning of the school year when children face the alternative of school attendance or employment. This raises the question as to what can be done to induce these children to continue their education.

In Detroit the number of employed children under sixteen years of age has been reduced in a little over a year from more than twenty-five hundred to about three hundred, by requiring proof that the labor of the child is absolutely necessary for the support of the family. While this method has resulted in large numbers of children continuing their education who otherwise would have dropped out of school, it is open to the objection that it discriminates against the child who already has fewest advantages. Possibly as industrial education progresses a solution may be found by a type of school producing articles of commercial value, allowing pupils to be paid for their work while continuing their education.

The number of children entering employment would be somewhat reduced by proper physical examination of all applicants. While Massachusetts was the first state to provide for employment certificates, the first crude form being legalized in 1838, it has permitted other states to outstrip it in some ways. Particularly weak is the form supplied by the State for the physical examination of children seeking employment certificates. It requires the examining physician to sign the following statement: "The undersigned hereby certifies that he has made a thorough physical examination of the following named child————and that in his opinion said child is in sufficiently sound health and physically able to perform the work indicated on the reverse side of this certificate." No space is left for the word "not" for children who are not well and no statement is required that the performance of the work may or may not injure the child. The usual examination consists in asking the child his name and immediately signing the certificate. We have not had more than one child in a thousand refused a certificate of health.

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In some states a really conscientious physical examination is made of applicants for employment certificates, and re-examinations are provided for to determine whether employment is injuring the children. If the first examination shows the child to be possessed of physical defects, the certificate is refused permanently, or temporarily, or granted conditionally. If the certificate is refused temporarily, it is with the understanding that it will be granted when the parents of the child have had the physical defect corrected. If it is granted conditionally, it is with the agreement that the wages earned by the child shall be devoted to the correction of the physical defects and that the child shall be re-examined at a definite date.

Matters could be helped somewhat in Massachusetts if the physicians were required to give a detailed report of their examination instead of a general one and an opinion as to what effect the proposed work would have on the child's health. Children then might be kept in school who now leave because their health is so poor that they do not have ambition to keep pace with their fellow pupils, and such a policy might also result in these children receiving proper medical care.

The Hampden County Training School, to which truants from the western part of Massachusetts are committed, has been the subject of an investigation by a legislative committee. While the investigation was somewhat discredited by the sensational features injected into it, considerable good may come from it. The County Commissioners, as a result of the investigation, asked the superintendents of schools of Hampden County to visit the Training School and make suggestions for improving it. The report of the superintendents was a most excellent one and embodies suggestions which, if fully carried out, should make this school a model one.

An unfortunate feature of the work of the Legislative Committee is that its report recommends the abolishing of training schools and suggests the substitution of disciplinary day schools with longer sessions. It is true that in very large cities there is a place for these day schools for truants, but they do not solve the problem, as the officers doing the work in these cities testify. To abolish the training schools would be a return to conditions as they existed in Massachusetts fifty years ago when the cure of truancy was left to the cities and towns of the State and resulted in an intolerable neglect of the problem. A large percentage of boys committed to the training schools are under-nourished, have poor sleeping accommodations, and as a result are nervous and irritable, and really unable to apply themselves to study. They resist restraint, get into bad company, and, if not cared for, eventually get into a reform school. Just

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how such boys are to be helped by being told that they must study ten hours a day instead of five, or what methods are to be used to secure attendance for the longer period, is not clear.

In Springfield we have found it necessary to have less than one in a thousand of the school children committed to the Training School. These children vary in age from eight to fifteen years, and in grade from the first elementary through junior high school. It is difficult to see how such small and diverse groups in cities and towns smaller than Springfield can be given adequate training in the proposed disciplinary day schools. One of the chief reasons why the training schools would be more efficient under state control is that they would be fewer in number, with larger groups to deal with. This would afford a better opportunity for classification and more diversified vocational training.

The National League of Compulsory Education Officials, an association of the most progressive people in the country who are dealing with the problem of truancy, adopted a resolution at a recent meeting, recommending "the establishment of separate parental schools for girls as well as boys." Training or Parental Schools should first serve to make children physically fit. They should then help to solve the problem of the curriculum best adapted to the needs of this type of pupil. They should also furnish an example of home making in order that the pupils may know how to improve conditions in their own homes upon their return to them.

To abolish training schools because they have failed to realize their possibilities would be a grave error. It would appear to be better to find a way of developing their possibilities, giving, if necessary, some power of supervision or control to the superintendents of schools of the county within which each of the training schools is situated.

Respectfully submitted,

JOHN A. PARKER,
Chief Attendance Officer.

December 30, 1921.

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STATISTICS

ACCOMPANYING

Superintendent's Report

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TABLE SHOWING VALUE OF LAND AND BUILDINGS AND EQUIPMENT.

SCHOOLS.	Land.	Buildings.	Total.
Central High,	$172,800.00	$354,481.63	$527,281.63
High School of Commerce,	174,200.00	737,784.43	911,984.43
Technical High,	157,180.80	287,812.59	444,993.39
Vocational,	50,710.95	274,133.55	324,844.50
Acushnet Avenue,	16,000.00	48,608.15	64,608.15
Alden Street,	3,800.00	15,077.64	18,877.64
Armory Street,	8,500.00	148,567.08	157,067.08
Barrows,	18,700.00	44,989.59	63,689.59
Boston Road,	1,500.00	12,868.94	14,368.94
Brightwood,	18,505.38	162,735.54	181,240.92
Buckingham,	45,000.00	168,821.19	213,821.19
Carlisle,	3,000.00	200.00	3,200.00
Carew Street,	18,000.00	47,188.82	65,188.82
Central Street,	20,000.00	80,827.05	100,827.05
Charles Street,	4,000.00	14,859.09	18,859.09
Chestnut Street,	41,000.00	425,961.88	466,961.88
Continuation,	148,600.00	83,481.19	232,081.19
Dry Bridge,	1,000.00	1,578.49	2,578.49
Eastern Avenue,	5,400.00	30,580.92	35,980.92
East Main Street, I. O.,	3,000.00	12,853.48	15,853.48
East Springfield,	.....	662.54	662.54
East Union Street,	5,000.00	25,024.33	30,024.33
Five Mile Pond,	500.00	4,007.62	4,507.62
Forest Park,	30,000.00	435,190.21	465,190.21
Glenwood,	2,500.00	16,548.45	19,048.45
Homer Street,	32,350.48	176,534.60	208,885.08
Hooker,	29,500.00	269,869.61	299,369.61
Howard Street,	38,600.00	199,513.93	238,113.93
Jefferson Avenue,	7,500.00	42,047.98	49,547.98
Kensington Avenue,	10,500.00	98,589.07	109,089.07
Liberty,	18,341.34	77,513.01	95,854.35
Lincoln,	24,000.00	91,981.06	115,981.06
Myrtle Street, I. O.,	39,000.00	187,157.92	226,157.92
Pynchon Street,	.....	68,068.02	68,068.02
Rushville,	3,981.78	.....	3,981.78
School Street,	35,500.00	20,338.57	55,838.57
Sixteen Acres,	500.00	2,637.11	3,137.11
State Street,	69,000.00	.....	69,000.00
New Junior High,	.....	12,121.71	12,121.71
Strickland,	5,000.00	21,727.78	26,727.78
Sumner Avenue,	49,000.00	60,325.10	109,325.10
Tapley,	22,000.00	70,888.04	92,888.04
Wachogue,	200.00	800.00	1,000.00
Washington,	15,270.54	136,876.24	152,146.78
White Street,	14,000.00	49,966.41	63,966.41
Wilbraham Road,	23,123.80	.....	23,123.80
William Street,	14,000.00	58,913.75	72,913.75
Worthington Street,	12,000.00	68,304.91	80,304.91
Portables:			
Boston Road,	.....	1,525.00	1,525.00
Buckingham,	.....	4,225.00	4,225.00
Dry Bridge,	.....	1,550.00	1,550.00
East Main Street, I. O.,	.....	3,546.96	3,546.96
Rushville,	.....	4,175.94	4,175.94
Storehouse,	7,000.00	48,481.87	55,481.87
	$1,419,265.07	$5,212,378.99	$6,631,689.06
Operating Equipment:			
Furniture and Fixtures,		$203,116.39	
Miscellaneous,		53,761.20	
			256,877.59
Books and Educational Equipment,			299,623.18
			$7,188,189.83

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FINANCIAL SUMMARY.

(For the fiscal year ended November 30, 1921.)

	Appropriations. Original.	Additional.	Total.	Plus or Minus Transfers.	Net Appropriations.	Expenditures.	Balances.
Administration,	$40,080.00	$1,850.00	$41,930.00	—$300.00 +600.00	$42,230.00	$40,331.42	$1,898.58
Central High School,	130,507.00	1,000.00	131,507.00	—1,370.00	130,137.00	127,815.49	2,321.51
Technical High School,	143,398.00	575.00	143,973.00	+2,900.00 —4,500.00	146,873.00	146,835.66	37.34
High School of Commerce,	146,170.00	1,000.00	147,170.00	+210.00	142,880.00	142,564.01	315.99
Vocational School,	36,630.00	475.00	37,105.00	+1,800.00	38,905.00	37,899.01	1,005.99
Vocational School—Summer,	3,052.00	200.00	3,252.00		3,252.00	3,235.28	16.72
Continuation School,	50,741.00		50,741.00	—740.00	50,001.00	46,998.38	3,002.62
Graded Schools,	1,142,399.00	5,920.00	1,148,319.00	—775.00 +5,800.00	1,153,344.00	1,150,739.47	2,604.53
Kindergartens,	79,761.00	1,087.00	80,848.00	—1,570.00	79,278.00	77,185.00	2,093.00
Evening High School,	11,460.00		11,460.00	—600.00	10,860.00	10,757.96	102.04
Evening School of Trades,	12,820.00		12,820.00	—1,500.00	11,320.00	10,919.68	400.32
Evening Vocational School,	2,919.00		2,919.00	—1,200.00	1,719.00	1,320.85	398.15
Vocational—Special,	250.00		250.00		250.00	46.88	203.12
Elementary Evening Schools and Evening School Extension,	24,100.00		24,100.00	—1,525.00	22,575.00	20,501.13	2,073.87
Summer Schools,	11,280.00		11,280.00			11,280.00	11,280.00
Total,	$1,835,567.00	$12,107.00	$1,847,674.00	—$2,770.00	$1,844,904.00	$1,817,150.22	$27,753.78
*Schoolhouse Property,	417,942.55		417,942.55		417,942.55	412,706.30	5,236.25
Total,	$2,253,509.55	$12,107.00	$2,265,616.55	—$2,770.00	$2,262,846.55	$2,229,856.52	$32,990.03
High Schools Lunch,	53,530.00	3,633.75	57,163.75	—1,350.00 +2,100.00	57,913.75	57,842.26	71.49
Graded Schools Lunch,	1,380.00		1,380.00	370.00	1,750.00	1,668.45	81.55
Total,	$2,308,419.55	$15,740.75	$2,324,160.30	—$1,650.00	$2,322,510.30	$2,289,367.23	$33,143.07
Smith-Hughes Fund, 1920-1921,	782.70		782.70		782.70	782.70	
Smith-Hughes Fund, 1921-1922,	2,046.34		2,046.34		2,046.34	1,827.16	219.18
Total,	$2,311,248.59	$15,740.75	$2,326,989.34	—$1,650.00	$2,325,339.34	$2,291,977.09	$33,362.25

*Under control of City Property Committee.

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EXPENDITURES

ADMINISTRATION.

Salaries.		
Superintendent,	$5,800.00	
*Assistant Superintendent,	1,300.00	
Secretary of the School Committee,	100.00	
Chief Clerk,	2,800.00	
Clerks,	10,037.04	
Attendance Officers,	9,433.33	
		$29,470.37
Office Supplies,		651.28
Printing,		1,445.15
Communication Service.		
Postage,	662.15	
Telephone,	212.58	
Telegraph,	48.91	
		923.64
Freight and Express,		5.10
Miscellaneous Supplies and Expenses.		
Auto upkeep,	250.00	
Magazine subscriptions,	120.75	
Miscellaneous,	16.10	
		386.85
Traveling Expenses,		520.76
Maintenance and Repairs of Equipment,		115.10
Replacement of Equipment,		265.29
New Equipment,		54.38
New Equipment (Outstanding Order),		52.50

STOREHOUSE.

Salaries,		2,600.00
Expenses.		
Telephone,	53.99	
Delivering supplies,	3,776.71	
Miscellaneous,	10.30	
		3,841.00
		$40,331.42

*In addition to salary as Supervisor of Elementary Schools and Kindergartens, which is included in item, "Salaries—Supervisors," under the account in Graded Schools.

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CENTRAL HIGH SCHOOL.

ADMINISTRATION.

Salary—Principal,		$4,700.00
Salaries—Clerical Assistance,		1,470.00
Office Supplies,		135.85
Printing,		586.44
Printing (Outstanding Order),		110.00
Communication Service.		
Postage,	$32.00	
Telephone,	24.32	
		56.32
Freight and Express,		76.33
Traveling Expenses,		76.76

OPERATION.

Salaries—Teachers.		
Heads of departments,	23,062.50	
Teachers,	88,170.91	
		111,233.41
Salary—Matron,		1,193.25
Salaries—Miscellaneous Assistance.		
Piano accompanist,	100.00	
Science,	248.10	
Physical education,	431.60	
Drawing,	43.77	
Office,	70.23	
Miscellaneous,	18.45	
		912.15
Books.		
Text,	1,955.79	
Text (outstanding order),	418.99	
Reference,	199.23	
Reference (outstanding order),	80.00	
Magazine subscriptions,	29.90	
Binding,	221.10	
Covers,	190.50	
		3,045.51
Stationery Supplies.		
Paper.		
White,	$4.30	
Manila,	87.00	
Drawing,	51.90	
Notebooks,	270.36	
Blotting,	18.32	
Pressboard and cardboard,	161.15	
Miscellaneous,	66.60	
	659.63	
Ink,	20.65	
Paste, etc.,	6.12	
Pencils,	103.81	
Pens and holders,	36.00	
Thumb tacks and paper fasteners,	30.82	
Rubber erasers,	32.56	
Rubber bands,	6.45	
		895.04

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Supplies Used in Special Courses.			
Science.			
Glassware and small laboratory articles,	$156.78		
Chemicals,	298.25		
Miscellaneous,	523.91		
		$978.94	
Domestic Science.			
Provisions,	50.78		
Sewing supplies,	73.23		
		124.01	
Physical Education.			
Rent of field,	75.00		
Miscellaneous,	250.13		
		325.13	
Drawing.			
Paints,	52.98		
Paint pans and brushes,	67.96		
Drawing crayons,	26.40		
Miscellaneous,	68.07		
		215.36	
			$1,643.44
Other Operating Supplies.			
Outline maps,		49.33	
Compasses,		51.31	
Rules,		3.90	
Maps, charts, and globes,		48.73	
Blackboard erasers,		10.83	
Sponges,		8.00	
Pencil sharpeners,		4.50	
Paper towels,		270.63	
Linen towels,		9.00	
Miscellaneous,		73.87	
			530.10
Other Operating Expenses.			
Graduation expenses,		220.81	
Miscellaneous,		49.35	
			270.16
Maintenance and Repair of Equipment.			
Science,		1.45	
Miscellaneous,		26.43	
			27.88
Replacement of Equipment.			
Science,			210.17
New Equipment.			
Science,		575.33	
Cookery,		19.65	
Miscellaneous,		47.70	
			642.68
			$127,815.49

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TECHNICAL HIGH SCHOOL.

ADMINISTRATION.

Salary—Principal,		$4,500.00
Salaries—Clerical Assistance,		2,599.94
Office Supplies,		130.73
Printing,		883.44
Communication Service.		
Postage,	$58.00	
Telephone,	53.40	
		111.40
Freight and Express,		172.61
Traveling Expenses,		71.41

OPERATION.

Salaries—Teachers.		
Heads of departments,	22,167.50	
Teachers,	103,365.12	
		125,532.62
Salaries—Miscellaneous Assistance.		
Tool room,	426.42	
Science,	46.92	
Physical education,	68.20	
English books,	133.27	
Piano accompanist,	100.00	
Miscellaneous,	48.00	
		822.81
Books.		
Text,	3,370.58	
Reference,	209.47	
Magazine subscriptions,	10.00	
Binding,	105.00	
Covers,	110.00	
		3,805.05
Stationery Supplies.		
Paper.		
White,	$420.00	
Manila,	136.25	
Notebooks,	437.50	
Envelopes,	6.50	
Blotting,	3.80	
Pressboard and cardboard,	16.90	
Miscellaneous,	40.50	
	1,116.45	
Ink,	15.60	
Pencils,	12.50	
Pens and holders,	60.96	
Thumb tacks and paper fasteners,	25.50	
Rubber erasers,	6.36	
Rubber bands,	7.74	
		1,245.11

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Supplies Used in Special Courses.			
Science.			
Glassware and small laboratory articles,	$30.49		
Chemicals,	524.27		
Miscellaneous,	262.98		
		$817.74	
Drawing.			
Small drawing tools,	84.71		
Paper, pencils, and ink,	626.96		
Miscellaneous,	17.65		
		729.32	
Machine Shop.			
Small tools,	91.68		
Castings and metals,	393.88		
Miscellaneous,	41.70		
		527.26	
Wood Work.			
Lumber,	604.43		
Small tools,	77.56		
Miscellaneous,	187.76		
		869.75	
Household Science,		324.65	
Household Arts,		92.66	
Design.			
Small tools,	29.41		
Miscellaneous,	193.06		
		222.47	
Forging.			
Coal,	128.00		
Metals,	346.32		
		474.32	
Physical Education.			
Rent of field,	75.00		
Miscellaneous,	183.59		
		258.59	
			4,316.76
Other Operating Supplies.			
Paper towels,		393.81	
Miscellaneous,		124.06	
			517.87
Other Operating Expenses.			
Graduation expenses,		202.21	
Miscellaneous,		97.01	
			299.22
Maintenance and Repairs of Equipment.			
Science,		2.79	
Drawing,		5.80	
Machine shop,		82.45	
Wood work,		72.30	
Household arts,		15.25	
Design,		12.75	
Forging,		4.05	
Miscellaneous,		232.98	
			428.37

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Replacement of Equipment.		
Science,	$78.86	
Drawing,	117.18	
Machine shop,	266.08	
Machine shop (outstanding order),	45.00	
Wood work,	7.10	
Household science,	17.50	
Miscellaneous,	30.00	
		$561.67
New Equipment.		
Science,	217.28	
Drawing,	417.37	
Machine shop,	25.00	
Household science,	27.00	
Miscellaneous,	150.00	
		836.65
		$146,835.66

HIGH SCHOOL OF COMMERCE.

ADMINISTRATION.

Salary—Principal,		$4,500.00
Salaries—Clerical Assistance,		2,600.00
Office Supplies,		23.41
Printing,		688.49
Communication Services.		
Postage,	$29.00	
Telephone,	19.49	
		48.49
Freight and Express,		156.35
Traveling Expenses,		35.17

OPERATION.

Salaries—Teachers.		
Heads of departments,	16,822.50	
Teachers,	102,425.94	
		119,248.44
Salary—Matron,		1,200.00
Salaries—Miscellaneous Assistance.		
Moving pictures,	395.85	
Physical education,	249.12	
Piano accompanist,	100.00	
Miscellaneous,	40.97	
		785.94
Books.		
Text,	1,933.65	
Text (outstanding order),	30.00	
Reference,	576.22	
Binding,	102.80	
Mending materials,	8.33	
Covers,	92.00	
Magazine subscriptions,	64.56	
		2,802.56

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Stationery Supplies.			
Paper.			
White,	$341.40		
Manila,	61.00		
Drawing,	48.14		
Bookkeeping,	1,702.01		
Notebooks	67.21		
Blotting,	28.50		
Pressboard and cardboard,	1.00		
Typewriting,	324.40		
Miscellaneous,	91.52		
		$2,665.18	
Ink,		91.20	
Paste,		2.48	
Pencils,		163.50	
Pens and holders,		134.00	
Thumb tacks and paper fasteners,		56.42	
Rubber erasers,		23.27	
Rubber bands,		6.67	
Typewriter ribbons,		152.86	
Miscellaneous,		124.53	
			$3,425.11
Supplies Used in Special Courses.			
Science.			
Chemicals,	4.50		
Miscellaneous,	153.33		
		157.83	
Shop.			
Lumber,	161.67		
Small tools and hardware,	25.71		
Miscellaneous,	66.18		
		253.56	
Cookery,		786.42	
Sewing,		106.44	
Physical Education.			
Rent of field,	75.00		
Laundry	1,299.14		
Miscellaneous,	99.55		
		1,473.69	
Drawing,		299.16	
			3,077.10
Other Operating Supplies.			
Paper towels,		536.53	
Outline maps,		65.29	
Maps and charts,		131.41	
First-aid supplies,		40.43	
Miscellaneous,		176.19	
			949.85
Other Operating Expenses.			
Moving pictures.			
Films,	549.83		
Miscellaneous,	59.26		
		609.09	
Graduation expenses,		226.76	
			835.85

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Maintenance and Repair of Equipment.			
Shop,		$6.00	
Cookery,		.45	
Sewing,		48.00	
Physical education,		9.16	
Miscellaneous,		95.73	
			$159.34
Replacement of Equipment.			
Shop,		38.45	
Physical education,		165.04	
Miscellaneous,		30.74	
			234.23
New Equipment.			
Science,		20.50	
Miscellaneous,		1,778.18	
			1,798.68
			$142,564.01

VOCATIONAL SCHOOL.

ADMINISTRATION.

Salary—Principal,			$2,614.34
Salaries—Clerical Assistance,			1,080.28
Office Supplies,			29.32
Communication Service.			
Postage,		$37.25	
Telephone,		14.22	
			51.47
Freight and Express,			121.74
Traveling Expenses,			74.87

OPERATION.

Salaries—Teachers,			28,484.06
Salaries—Miscellaneous Assistance,			47.00
Books,			30.33
Stationery Supplies.			
Paper,		31.48	
Ink,		1.53	
Paste, etc.,		1.28	
Pencils,		53.50	
Pens and holders,		2.08	
Thumb tacks and paper fasteners,		11.25	
Rubber erasers,		2.99	
Rubber bands,		.86	
			154.97
Supplies Used in Special Courses.			
Carpentry.			
Lumber,	$439.65		
Lumber (outstanding order),	50.00		
Hardware,	62.48		
Miscellaneous,	79.41		
		631.54	

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Cabinet.			
Lumber,	$471.16		
Hardware,	68.13		
Miscellaneous,	80.78		
		$615.07	
Pattern.			
Lumber,	202.49		
Hardware,	7.31		
Miscellaneous,	75.76		
		285.56	
Machine Shop.			
Small tools,	44.63		
Metals and castings,	632.68		
Metals and castings (outstanding order),	30.00		
Miscellaneous,	292.51		
		999.77	
Drawing,		140.56	
Electricity,		142.19	
			$2,814.69
Other Operating Supplies.			
Paper towels,		352.47	
First-aid supplies,		17.98	
Miscellaneous,		89.87	
			460.32
Other Operating Expenses.			
Graduation expenses,		5.20	
Pupils' car tickets,		245.00	
Miscellaneous,		5.67	
			255.87
Maintenance and Repair of Equipment.			
Printing,		5.25	
Carpentry,		6.15	
Cabinet,		6.16	
Pattern,		10.92	
Machine shop,		138.11	
Miscellaneous,		18.50	
			185.09
Replacement of Equipment.			
Printing,		8.56	
Carpentry,		47.00	
Cabinet,		47.19	
Pattern,		36.56	
Machine shop,		680.30	
Miscellaneous,		171.60	
			991.21
New Equipment.			
Carpentry,		60.66	
Cabinet,		60.66	
Pattern,		29.62	
Machine shop,		320.11	
Miscellaneous,		32.40	
			503.45
			$37,899.01

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VOCATIONAL—SUMMER SCHOOL.

Salaries.		
Principal,	$210.00	
Teachers,	2,493.75	
		$2,703.75
Supplies,		511.40
Other Operating Expenses,		20.18
		$3,235.33

CONTINUATION SCHOOLS.

ADMINISTRATION.

Salary—Principal,		$3,000.00
Salaries—Clerical Assistance,		965.06
Office Supplies,		114.11
Communication Service.		
Postage,	$43.50	
Telephone,	195.08	
		238.58
Freight and Express,		278.21
Traveling Expenses,		42.29

OPERATION.

Salaries—Teachers,		25,384.72
Books.		
Text,	122.28	
Reference,	76.74	
		199.02
Stationery Supplies.		
Paper,	63.49	
Ink,	.90	
Paste, etc.,	.57	
Pencils,	54.03	
Thumb tacks and paper fasteners,	20.02	
Rubber erasers,	1.59	
Rubber bands,	1.29	
		141.89
Supplies Used in Special Courses.		
Boys' Division,	1,570.04	
Boys' Division (outstanding order),	250.00	
Girls' Division,	329.96	
		2,150.00
Other Operating Supplies,		115.49
Other Operating Expenses.		
Car tickets.		
Pupils', $420.00		
Teachers', 157.50		
	577.50	
Installing machinery,	306.50	
Miscellaneous,	1.05	
		885.05
Maintenance and Repair of Equipment,		8.82
Replacement of Equipment,		173.33

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New Equipment.		
Boys' Division,	$12,251.64	
Boys' Division (outstanding orders),	195.00	
Girls' Division,	747.64	
Girls' Division (outstanding order),	112.50	
		$13,306.78
		$46,998.38

GRADED SCHOOLS.

ADMINISTRATION.

Salaries.		
Supervisors,	$38,049.40	
Supervising principals,	72,654.79	
		$110,704.19
Office Supplies,		190.69
Printing,		2,123.94
Communication Service.		
Postage,	30.00	
Telephone,	1,334.84	
		1,364.84
Freight and Express,		712.64
Other Miscellaneous Expenses,		234.13
Traveling Expenses,		335.10

OPERATION.

Salaries—Teachers,		940,100.24
Salaries—Matrons,		3,922.10
Transportation of Pupils.		
Salaries,	1,325.00	
Car tickets,	4,086.25	
Car tickets (outstanding order),	350.00	
		5,761.25
Salaries—Miscellaneous.		
Manual arts,	18.32	
Art and hand work,	587.48	
Care of lunch rooms,	351.00	
Miscellaneous,	16.50	
		973.30
Support of Truants,		2,432.00
Books.		
Text,	19,577.35	
Text (outstanding orders),	256.70	
Reference,	662.08	
Binding,	784.70	
Mending materials,	507.87	
Covers,	2,363.00	
Writing copies,	118.80	
Writing copies (outstanding order),	175.00	
Music,	91.57	
		24,537.07

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Stationery Supplies.			
Paper.			
White,	$4,281.66		
White (outstanding order),	323.28		
Manila,	2,169.14		
Drawing,	908.08		
Bookkeeping,	877.52		
Notebooks,	1,007.16		
Envelopes,	471.67		
Blotting,	207.69		
Pressboard and cardboard,	1,662.72		
Labels,	121.56		
Cards,	91.85		
Miscellaneous,	166.75		
		$12,289.08	
Ink,		337.32	
Paste, etc.,		712.26	
Pencils,		2,230.62	
Pens and holders,		1,144.64	
Thumb tacks and paper fasteners,		571.54	
Rubber erasers,		194.33	
Rubber bands,		177.37	
			$17,657.16
Supplies Used in Special Courses.			
Physical Education.			
Baseball,	464.61		
Field day,	104.42		
Phonographic records and dance music,	161.75		
Balls,	461.61		
Rent of field,	125.00		
Miscellaneous,	615.91		
		1,933.30	
Manual Arts.			
Lumber,	3,664.14		
Lumber (outstanding order),	105.33		
Metals,	329.43		
Cement, sand, etc.,	145.34		
Paints, etc.,	331.14		
Hardware,	540.51		
Hardware (outstanding order),	12.50		
Printing,	198.04		
Mechanical drawing,	420.07		
Mechanical drawing (outstanding order),	32.00		
Miscellaneous,	121.60		
		5,950.10	
Art and Hand Work.			
Paint,	710.60		
Paint pans and brushes,	95.58		
Drawing crayons,	936.36		
Miscellaneous art supplies,	843.30		
Lumber,	299.75		
Hardware,	46.90		
Paints,	51.10		
Miscellaneous hand work supplies,	858.72		
		3,842.31	

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Home Economics.			
Provisions,	$2,671.75		
Ice,	49.41		
Laundry,	61.60		
Sewing supplies,	847.84		
		$3,630.60	
Psychological Laboratory,		7.39	
Science.			
Junior high science supplies,	43.85		
Gardens,	334.61		
Elementary science supplies,	147.62		
		531.08	
			$15,894.78
Supplies Used in Open-Air Rooms.			
Provisions,		3,668.69	
Laundry,		134.43	
Miscellaneous,		107.42	
			3,910.54
Other Operating Supplies.			
Kindergarten material,		682.10	
Outline maps,		161.16	
Compasses,		245.00	
Rules,		276.30	
Maps, charts, and globes,		464.36	
Maps, charts, and globes (outstanding order),		120.25	
Blackboard erasers,		47.57	
Sponges,		430.40	
Chalk,		322.25	
Pencil sharpeners,		151.70	
Scissors,		1,282.42	
Mats,		233.16	
Burlap,		60.84	
Hygiene supplies,		254.76	
Paper towels,		1,388.75	
Linen towels,		382.25	
Linen towels (outstanding order),		45.00	
Word and number builders,		246.21	
Hectographs,		78.25	
First-aid supplies,		32.47	
Miscellaneous,		1,189.17	
			7,994.37
Other Operating Expenses,			542.53
Maintenance and Repair of Equipment.			
Physical education,		168.34	
Manual arts,		136.27	
Art and hand work,		22.67	
Home economics,		41.30	
Miscellaneous,		114.19	
			477.77
Replacement of Equipment.			
Physical education,		13.50	
Manual arts,		788.57	
Manual arts (outstanding orders),		204.37	
Art and hand work,		28.80	
Home economics,		343.91	
Home economics (outstanding orders),		533.79	

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Science,	$31.00	
Miscellaneous,	257.86	
		$2,206.80
New Equipment.		
Physical education,	236.55	
Physical education (outstanding order),	100.00	
Manual arts,	614.74	
Manual arts (outstanding order),	257.00	
Art and hand work,	11.25	
Home economics,	735.26	
Home economics (outstanding order),	319.25	
Psychological laboratory,	38.00	
Science,	45.16	
Miscellaneous,	1,306.82	
		3,664.03
		$1,150,739.47

KINDERGARTENS.

Salaries—Teachers,		$74,645.23
Supplies,		1,313.09
Supplies (outstanding order),		44.45
Other Operating Expenses.		
Christmas allowance,	$51.00	
Tuning pianos,	11.50	
Miscellaneous,	68.55	
		131.05
Replacement of Equipment,		1,000.06
New Equipment (outstanding order),		51.12
		$77,185.00

EVENING HIGH SCHOOL.

ADMINISTRATION.

Salary—Principal,	$568.00
Salaries—Clerical Assistance,	285.00
Office Supplies,	20.76
Printing,	109.25
Communication Service,	11.00
Freight and Express,	7.25

OPERATION.

Salaries—Teachers,	8,531.50
Books,	274.98
Books (outstanding orders),	127.50

Stationery Supplies.		
Paper.		
White,	$21.70	
Typewriter,	102.40	
Manila,	5.73	
Drawing,	10.00	
Bookkeeping,	198.00	
Notebooks,	40.38	
Envelopes,	1.36	

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Blotting,	$3.17		
Pressboard and cardboard,	26.07		
Miscellaneous,	11.15		
		$419.96	
Pencils,		62.90	
Pens and holders,		51.28	
Thumb tacks and paper fasteners,		1.59	
Rubber erasers,		3.65	
Miscellaneous,		93.25	
			$632.63
Supplies Used in Special Courses,			33.73
Other Operating Supplies,			66.76
Other Operating Expenses.			
Graduation,		40.75	
Models,		24.25	
Miscellaneous,		24.60	
			89.60
			$10,757.96

EVENING SCHOOL OF TRADES.

ADMINISTRATION.

Salary—Principal,			$720.00
Salaries—Clerical Assistance,			319.50
Printing,			44.41

OPERATION.

Salaries—Teachers,			8,227.70
Salaries—Miscellaneous,			170.75
Supplies Used in Special Courses.			
Machine shop,		$123.86	
Electricity,		171.68	
Electricity (outstanding orders),		90.58	
Plumbing,		152.21	
Wood work,		42.33	
Sewing,		43.04	
Cookery,		87.45	
Design,		80.62	
			791.97
Other Operating Supplies,			154.64
Other Operating Expenses,			29.96
Repairs and Maintenance of Equipment,			2.99
New Equipment,			347.76
			$10,919.68

EVENING VOCATIONAL SCHOOL.

ADMINISTRATION.

Salary—Principal,			$189.00
Salaries—Clerical Assistance,			90.00

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OPERATION.

Salaries—Teachers,		$957.54
Supplies,		64.01
Other Operating Expenses,		20.30
		$1,320.85

VOCATIONAL—SPECIAL.

Tuition,	$46.88

ELEMENTARY EVENING SCHOOLS AND EVENING SCHOOLS EXTENSION.

ADMINISTRATION.

Salaries—Directors and Principals,		$4,280.00
Office Supplies,		7.61
Printing,		120.16
Freight and Express,		27.71

OPERATION.

Salaries—Teachers,		14,588.01
Books,		605.96
Stationery Supplies.		
Paper,	$90.17	
Paste, etc.,	3.51	
Pencils,	33.60	
Pens and holders,	1.04	
Thumb tacks and paper fasteners,	1.34	
Rubber erasers,	4.11	
Rubber bands,	.34	
		134.11
Supplies Used in Special Courses,		10.60
Other Operating Supplies,		133.30
Other Operating Expenses.		
Films,	326.31	
Typewriter rental,	163.50	
Miscellaneous,	95.86	
		585.67
Equipment,		58.00
		$20,501.13

HIGH SCHOOLS LUNCH.

OPERATION.

Salaries.		
Director,	$2,000.00	
Assistant Director,	1,200.00	
Other Assistance,	11,320.61	
		$14,520.61
Supplies.		
Provisions,	$7,667.73	
Ice,	172.61	
Napkins,	58.91	
Cleaning supplies,	247.84	
Miscellaneous,	294.76	
		$8,441.85

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Other Operating Expenses.			
Car fares,		$69.30	
Postage,		3.50	
Laundry,		315.51	
Telephone,		1.15	
Freight,		33.27	
Miscellaneous,		35.89	
			$558.62
Maintenance and Repairs of Equipment,			133.30
Replacement of Equipment,			530.61
New Equipment,			3,657.27
			$57,342.26

GRADED SCHOOLS LUNCH.

OPERATION.

Salaries,			$576.00
Supplies.			
Provisions,		$982.58	
Miscellaneous,		10.15	
			992.73
Miscellaneous Expenses,			13.39
Replacement of Equipment,			2.29
New Equipment,			84.04
			$1,668.45

SPECIAL.

Smith-Hughes Fund, 1920–1921.			
Vocational—Day.			
Principal,	$55.66		
Teachers,	445.28		
		$500.94	
Vocational—Evening.			
Teachers,		281.76	
			$782.70
Smith-Hughes Fund, 1921–1922.			
Vocational—Day.			
Principal,	$270.00		
Teachers,	1,480.16		
		$1,750.16	
Vocational—Evening.			
Teachers,		77.00	
			$1,827.16

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SCHOOL BUILDINGS.

Expenditures for the operation and maintenance of school buildings, including alterations and permanent improvements, and for new buildings, are made by the Committee on City Property of the City Government, not by the School Board. They are included in this report as a matter of information and convenience.

	Appropriations.	Expenditures.	Balances.
Administration,.....	$10,290.00	$10,184.33	$105.67
Operation,.....	300,898.83	298,440.00	2,458.83
Maintenance,.....	106,753.72	104,081.97	2,671.75
Total,.....	$417,942.55	$412,706.30	$5,236.25

Expenditures for New Buildings.

Vocational School,.....	$161,274.92	
New Junior High School,.....	15,184.71	
Chestnut Street School,.....	8,002.15	
Forest Park School,.....	11,817.30	
Homer Street School,.....	9,561.93	
Hooker School (Old Building),.....	724.06	(Special account)
Liberty School,.....	600.00	(Special account)
Myrtle Street,.....	32,500.00	(Special account)
Pynchon School,.....	17,556.16	(Special account)
Total,.....	$257,221.23.	

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RECEIPTS.

(For the fiscal year ended November 30, 1921.)

	Tuition.	From Commonwealth.	From Federal Board for Vocational Education.	Books and Materials sold, etc.	Moving Pictures.	Recovered Expenditures.	Total.
Central High,	$11,345.00			$83.34			$11,428.34
Technical High,	17,875.00			305.15			18,180.15
High School of Commerce,	10,013.08			263.22	$1,280.70		11,557.00
Vocational School,	6,622.50	$10,733.75	$56.53 17,111.00	588.14			35,111.92
Vocational Special,		52.29					52.29
Continuation School,		936.32		163.92			1,100.24
Graded Schools,	9,161.60	756.25		923.04		$8.20	10,849.09
Kindergartens,				12.25			12.25
Evening High,	1,082.13			28.26			1,110.39
Evening School of Trades,	2,967.00			30.56			2,997.56
Evening Vocational,	560.00	1,026.37					1,586.37
Elementary Evening and Evening Extension,	24.98	5,945.99					5,970.97
Total,	$59,651.29	$19,450.97	$17,167.53	$2,397.88	$1,280.70	$8.20	$99,956.57
High Schools Lunch,							47,831.51
Graded Schools Lunch,							1,518.66
Total,							$149,306.74

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COST PER PUPIL.

(Based on average number belonging during fiscal year ended November 30, 1921.)

SCHOOLS.	Teachers' Salaries.	Books.	Supplies and Other Expenses of Instruction.	Repair and Replacement of Equipment.	Transportation of Pupils.	New Equipment.	Total.	Administration Expenses.	Total.	*Total Deducting Receipts.
Central High,	$146.05	$3.84	$10.02	$0.30	....	$0.81	$161.02	$1.85	$162.87	$148.47
High School of Commerce,	122.59	3.00	13.92	.42	....	1.92	141.85	1.84	143.69	131.32
Technical High,	154.62	4.52	13.28	1.18	....	1.00	174.60	1.85	176.45	154.83
Vocational,	162.77	.15	23.88	5.74	$1.20	2.46	196.20	1.83	198.03	26.67
Graded,	63.53	1.47	3.84	.16	.35	.22	69.57	1.85	71.42	70.77
Kindergartens,	61.39	....	1.23	.82	....	.04	63.48	1.85	65.33	65.32
Evening High,	12.97	.39	1.98	....	....	....	15.34	1.85	17.19	15.60
Evening Trades,	26.93	....	4.49	.01	....	1.04	32.47	1.84	34.31	25.41
Evening Vocational,	22.00	....	2.54	....	....	....	24.54	1.84	26.38	3.20
AVERAGES.										
Day—High,	$140.33	$3.76	$12.51	$0.63	....	$1.27	$158.50	$1.85	$160.35	$148.22
Day—Elementary,	64.52	1.36	3.89	.27	$0.33	.23	70.60	1.85	72.45	69.91
All DAY Schools,	73.93	1.66	4.97	.31	.29	.36	81.52	1.85	83.37	79.64

*Receipts are given on preceding page.

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SCHOOL CENSUS.

Population of City, 1921 (Assessors' Estimate),..... 135,000
Population of City, 1920 (Federal Census),..... 129,338

Number of children in Springfield between 5 and 16 years of age on April 1, 1921.

Ages	5 yrs. to 7 yrs.	7 yrs. to 14 yrs.	14 yrs. to 16 yrs.	Total
Public Schools,.....	Boys 1,893 Girls 1,705 3,598	Boys 6,271 Girls 5,989 12,260	Boys 1,357 Girls 1,276 2,633	Boys 9,521 Girls 8,970 18,491
Parochial Schools,..	Boys 253 Girls 256 509	Boys 1,439 Girls 1,496 2,935	Boys 188 Girls 240 428	Boys 1,880 Girls 1,992 3,872
Other Private Schools,.....	Boys 11 Girls 9 20	Boys 29 Girls 59 88	Boys 13 Girls 38 51	Boys 53 Girls 106 159
Institutions,.....	Boys 0 Girls 2 2	Boys 27 Girls 6 33	Boys 21 Girls 7 28	Boys 48 Girls 15 63
Not Attending School,.....	Boys 60 Girls 67 127	Boys 15 Girls 30 45	Boys 9 Girls 26 35	Boys 84 Girls 123 207
At Work,.....	Boys .. Girls	Boys .. Girls	Boys 296 Girls 283 579	Boys 296 Girls 283 579
Total,.....	Boys 2,217 Girls 2,039 4,256	Boys 7,781 Girls 7,580 15,361	Boys 1,884 Girls 1,870 3,754	Boys 11,882 Girls 11,489 23,371

Illiterate Minors, Boys 190
Girls 124
314

Number of children in Springfield between 5 and 16 years of age:—

September 1, 1910	14,659
September 1, 1911	15,221
September 1, 1912	15,915
September 1, 1913	16,855
September 1, 1914	17,480
September 1, 1915	18,129
April 1, 1917	20,018
April 1, 1918	21,434
April 1, 1919	22,793
April 1, 1920	22,661
April 1, 1921	23,371

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TABLE SHOWING NUMBER OF PUPILS COMPLETING JUNIOR

(For the school year, Sept

	Total Number Completing Junior High School Work.			Entered							
				Central High.			High School of Commerce.			Technic	
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Bo
H. S. Commerce.											
January, 1921,.....	55	21	34	2	1	1	37	6	31	15	1
June, 1921,.....	35	16	19	6	3	3	17	4	13	10	—
Total,.....	90	37	53	8	4	4	54	10	44	25	2
Buckingham.											
January, 1921,.....	55	26	29	13	7	6	20	..	20	21	1
June, 1921,.....	92	40	52	33	12	21	27	7	20	28	1
Total,.....	147	66	81	46	19	27	47	7	40	49	3
Chestnut Street.											
January, 1921,.....	122	49	73	15	7	8	70	11	59	37	3
June, 1921,.....	145	58	87	27	16	11	64	6	58	47	3
Total,.....	267	107	160	42	23	19	134	17	117	84	6
Forest Park.											
January, 1921,.....	73	33	40	27	10	17	20	2	18	25	2
June, 1921,.....	160	67	93	53	20	33	54	11	43	51	3
Total,.....	233	100	133	80	30	50	74	13	61	76	5
Myrtle Street.											
January, 1921,.....	22	10	12	4	..	4	13	5	8	5	
June, 1921,.....	22	7	15	..	..	..	12	2	10	8	—
Total,.....	44	17	27	4	..	4	25	7	18	13	1
State Street.											
January, 1921,.....	72	46	26	31	17	14	3	1	2	37	2
June, 1921,.....	103	68	35	26	21	5	24	1	23	43	4
Total,.....	175	114	61	57	38	19	27	2	25	80	6
Totals.											
January, 1921,.....	399	185	214	92	42	50	163	25	138	140	11
June, 1921,.....	557	256	301	145	72	73	198	31	167	187	14
Total,.....	956	441	515	237	114	123	361	56	305	327	25

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HIGH SCHOOL WORK, WHAT SCHOOLS THEY ENTERED, ETC.

ember 8, 1920—June 30, 1921.)

al High.		Vocational.	Private, Parochial or Business.			At Work.			At Home.			Left City.		
ys	Girls	Boys	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
4	4	..	..	..	..	..	..	..	..	..	..	1	..	1
9	1	..	..	..	..	2	..	2	..	..	..	..	..	..
8	2	..	..	..	..	2	..	2	..	..	..	1	..	1
9	2	..	..	..	..	1	..	1	..	..	..	..	..	..
9	9	1	..	..	..	..	..	..	1	..	1	2	1	1
8	11	1	..	..	..	1	..	1	1	..	1	2	1	1
1	6	..	..	..	..	..	..	..	..	..	..	..	..	..
3	14	..	..	..	..	1	1	..	..	..	..	6	2	4
4	20	..	..	..	..	1	1	..	..	..	..	6	2	4
1	4	..	1	..	1	..	..	..	..	..	..	..	..	..
5	16	..	..	..	..	..	..	..	..	..	..	2	1	1
6	20	..	1	..	1	..	..	..	..	..	..	2	1	1
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	8	..	1	..	1	..	..	..	1	..	1	..	..	..
0	8	..	1	..	1	..	..	..	1	..	1	..	..	..
7	10	..	..	..	..	1	1	..	..	..	..	..	..	..
1	2	..	..	..	..	5	3	2	1	1	..	4	1	3
8	12	..	..	..	..	6	4	2	1	1	..	4	1	3
7	23	..	1	..	1	2	1	1	..	..	..	1	..	1
2	45	1	1	..	1	8	4	4	3	1	2	14	5	9
9	68	1	2	..	2	10	5	5	3	1	2	15	5	10

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SUMMARY,

SCHOOL ENROLLMENT AND ATTENDANCE.

(For the school year, September 8, 1920—June 30, 1921.)

SCHOOLS.	Enrollment.	Average Number Belonging.	Average Number Attending.	Per cent. of Attendance.
Junior College,	31	27.09	25.94	95.75
Senior High,	2,602	2,459.58	2,293.99	93.27
Vocational,	254	180.02	169.16	93.98
Junior High,	4,602	4,384.67	4,122.59	94.02
Elementary,	13,914	12,238.27	11,320.24	92.50
Kindergartens,	2,225	1,244.26	999.31	80.31
All Day Schools,	23,628	20,533.89	18,931.23	92.20
Evening High,	1,302	687.50	516.20	75.08
Evening Elementary,	1,017	486.13	380.02	78.17
Evening Trades,	1,072	351.58	282.66	80.40
Evening Vocational,	125	86.81	57.98	66.79
All Evening Schools,	3,516	1,612.02	1,236.86	76.67

CONTINUATION SCHOOL.

(For the school year, September 8, 1920—June 30, 1921.)

	Boys.	Girls.	Total.
Enrollment,	593	531	1,126
Average Number Belonging,	139.0	95.54	234.54
Average Number Attending,	122.76	85.73	208.49
Per cent. of Attendance,	88.32	89.73	88.89

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NUMBER OF ROOMS IN ELEMENTARY AND JUNIOR HIGH SCHOOLS.

(For the school year, September 8, 1920—June 30, 1921.)

	First Semester.							Second Semester.						
	Junior.	Elementary.	Ungraded.	Open-Air.	Special.	Kindergarten.	Total.	Junior.	Elementary.	Ungraded.	Open-Air.	Special.	Kindergarten.	Total.
Acushnet Avenue,		11			1	1	13		11			1	1	13
Alden Street,		4					4		4					4
Armory Street,	2	17			1	1	21	4	15			1	1	21
Barrows,	2	8			1		11	2	8			1		11
Boston Road,		4					4		4					4
Brightwood,		14			1	1	16		13			1	1	15
Buckingham,	21	2					23	22						22
Carew Street,		13				1	14		13				1	14
Central Street,	5	9			2	1	17	7	9			2	1	19
Charles Street,		4					4		4					4
Chestnut Street,	36	1					37	36						36
Continuation—Hooker,					1		1					3		3
Dry Bridge,			1				1			1				1
Eastern Avenue,		7				1	8		7				1	8
East Main Street, I. O.,		7				1	8		7				1	8
East Springfield,		2					2		2					2
East Union Street,		7				1	8		7				1	8
Five Mile Pond,		2					2		2					2
Forest Park,	28						28	30						30
Glenwood,		2					2		2					2
Homer Street,		18				1	19		19				1	20
Hooker,		18		2	3	1	24		18		2	3	1	24
Howard Street,	3	18		2	1	1	25	3	18		2	1	1	25
Jefferson Avenue,		11				1	12		11				1	12
Kensington Avenue,		15			1	1	17		15			1	1	17
Liberty,		7					7		7					7
Lincoln,		16					16		17					17
Myrtle Street, I. O.,	7	12			1	1	21	7	12			1	1	21
Rushville,		3					3		3					3
School Street,		4					4		4					4
Sixteen Acres,			2				2			2				2
State Street,	13						13	14						14
Strickland,		6					6		6					6
Sumner Avenue,		10				1	11		10				1	11
Tapley,		16				1	17		16				1	17
Washington,		15				1	16		15				1	16
White Street,		10				1	11		10				1	11
William Street,		9			1	1	11		9			1	1	11
Worthington Street,		12			1	1	14		12			1	1	14
Totals,	117	314	3	4	15	20	473	125	310	3	4	17	20	479

AVERAGE NUMBER OF PUPILS TO A ROOM IN ELEMENTARY SCHOOLS.

	Figured on Enrollment.	Figured on Average Number Belonging.
Junior High,	37.31	35.68
Elementary,	42.61	37.58
Open-Air,	19.75	23.22
Ungraded,	27.00	21.16
Special:—		
Grade Auxiliary,	23.00	20.05
General Auxiliary	27.50	22.78
Special Auxiliary,	15.00	13.86
Language Auxiliary,	41.67	28.58
Kindergartens,	111.25	62.21

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NUMBER OF TEACHERS' POSITIONS. DAY SCHOOLS.

(For the school year, September 8, 1920—June 30, 1921.)

	First Semester.			Second Semester.		
	Men.	Women.	Total.	Men.	Women.	Total.
Supervisors,	2	13	15	2	14	16
High Schools						
Principals,	3		3	3		3
Heads of Departments,	15	6	21	16	6	22
Teachers, full time, senior high,	38	87	125	41	91	132
Teachers, part time, senior high,	2	1	3	1	1	2
Teachers, full time, senior and junior high in High School of Commerce,	4	6	10	3	5	8
Teachers, full time, junior high in High School of Commerce,		1	1		1	1
Total,	62	101	163	64	104	168
Vocational School						
Director,	1		1	1		1
Teachers,	12		12	14		14
Total,	13		13	15		15
Continuation School						
Director,	1		1	1		1
Teachers,	6	7	13	8	8	16
Total,	7	7	14	9	8	17
Junior High Schools						
Principals,	5	1	6	5	1	6
Principals' Assistants,		3	3		3	3
Teachers in charge of rooms,		117	117		125	125
Special teachers of junior high subjects on full time in one building,	19	47	66	19	51	70
Special teachers of junior high subjects on full time who do not spend all their time in one building,	3	4	7	3	4	7
General substitutes,		2	2		2	2
Total,	27	174	201	27	186	213
Elementary Schools						
Supervising Principals,	4	17	21	4	17	21
Assistants to Supervising Principals and Associate Teachers,		15	15		15	15
Principals who devote half or more than half their time to teaching,		4	4		4	4
Teachers in charge of rooms,		295	295		291	291
Teachers of ungraded rooms,		3	3		3	3
Teachers of open-air rooms,		4	4		4	4
Teachers of special rooms,		15	15		17	17
Special teachers of elementary subjects on full time who do not spend all their time in one building,		4	4		4	4
General substitutes,		4	4		4	4
Kindergarten teachers,		20	20		20	20
Kindergarten assistants,		28	28		27	27
Total,	4	409	413	4	406	410
Total number of teachers' positions,	115	704	819	121	718	839
Special						
Director of Psychological Laboratory,	1		1	1		1
Assistant in Psychological Laboratory,		1	1		1	1
Visiting Teacher,		1	1		1	1
Director of High Schools Lunch Department,		1	1		1	1
Assistant Director of High Schools Lunch Department,		1	1		1	1
Total,	1	4	5	1	4	5
Total,	116	708	824	122	722	844

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EVENING SCHOOLS.

(School term, October 11, 1920—March 31, 1921.)

	Men.	Women.	Total.
Principal, High	1		1
Teachers, High	11	22	33
Principal, Trades	1		1
Teachers, Trades	21	8	29
Principals, Elementary	2	1	3
Teachers, Elementary		28	28
Principal, Vocational	1		1
Teachers, Vocational	7		7
Principal, Hooker Community Center	1		1
Teachers, etc., Hooker Community Center	3	16	19
Totals	48	75	123

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HIGH SCHOOL GRADUATES.

(For the school year, September 8, 1920—June 30, 1921.)

	TOTALS.			COURSES.											
				College Preparatory.			General.			Commercial.			Scientific.		
	Totals	Boys	Girls	Totals	Boys	Girls	Totals	Boys	Girls	Totals	Boys	Girls	Totals	Boys	Girls
CENTRAL HIGH.															
February, 1921,.....	143	49	94	71	31	40	72	18	54	...	..	..	...	..	..
June, 1921,.....	124	50	74	43	20	23	81	30	51	...	..	..	...	..	..
Total,.....	267	99	168	114	51	63	153	48	105	...	..	..	...	..	..
HIGH SCHOOL OF COMMERCE.															
February, 1921,.....	156	30	126	...	..	..	...	..	..	156	30	126	...	..	..
June, 1921,.....	119	26	93	...	..	..	...	..	..	119	26	93	...	..	..
Total,.....	275	56	219	...	..	..	...	..	..	275	56	219	...	..	..
TECHNICAL HIGH.															
February, 1921,.....	84	48	36	29	23	6	...	..	..	...	..	..	55	25	30
June, 1921,.....	88	73	15	28	27	1	...	..	..	...	..	..	60	46	14
Total,.....	172	121	51	57	50	7	...	..	..	...	..	..	115	71	44
TOTALS FOR ALL HIGH SCHOOLS.															
February, 1921,.....	383	127	256	100	54	46	72	18	54	156	30	126	55	25	30
June, 1921,.....	331	149	182	71	47	24	81	30	51	119	26	93	60	46	14
Total,.....	714	276	438	171	101	70	153	48	105	275	56	219	115	71	44

VOCATIONAL SCHOOL GRADUATES.

(For the school year, September 8, 1920—June 30, 1921.)

		COURSES.			
	Totals.	Cabinet.	Machine.	Pattern Making.	Printing.
June, 1921,.....	13	1	9	2	1

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CENTRAL HIGH SCHOOL.

DISTRIBUTION OF PUPILS BY AGES AND CLASSES, SEPTEMBER 30, 1921.

CLASS.	AGE.	12	13	14	15	16	17	18	19	20	21	Over 21	Totals.	
Post-Graduate....	Boys.					2	4		4				10	
	Girls.			1	1	1	6	1	1			1	12	22
IIIA.....	Boys.				2	13	2	10	1				28	
	Girls.				4	23	11	2	1				41	69
IIIB.....	Boys.				4	9	11	6	3			2	35	
	Girls.			1	7	20	20	5	2				55	90
IIA.....	Boys.		1	2	5	10	8	6	2				34	
	Girls.			3	20	19	16	1			1		60	94
IIB.....	Boys.		2	10	15	8	5	2		1	1	1	45	
	Girls.			16	34	19	6	1	1				77	122
IA.....	Boys.		6	9	25	10	9	3	2				64	
	Girls.		1	21	21	11	5						59	123
IB.....	Boys.	2	10	48	25	21	3	1				1	111	
	Girls.		12	51	27	6	3						99	210
	Boys.	2	19	69	76	73	42	28	12	1	1	4	327	
	Girls.		13	93	114	99	67	10	5		1	1	403	730
Totals,		2	32	162	190	172	109	38	17	1	2	5	730	

AVERAGE AGES.

CLASS.		Average Age.	Oldest.	Youngest.	Average Age of Class.
Post-Graduate...	Boys.	17–7	19–8	16–3	
	Girls.	17–2	23–10	14–11	17–5
IIIA.....	Boys.	16–10	19–0	15–2	
	Girls.	16–4	19–0	15–9	16–6
IIIB.....	Boys.	17–2	23–10	15–0	
	Girls.	16–2	19–2	14–5	16–7
IIA.....	Boys.	16–5	19–9	13–10	
	Girls.	15–11	21–4	14–1	16–1
IIB.....	Boys.	15–7	22–10	13–9	
	Girls.	15–3	19–9	14–1	15–5
IA.....	Boys.	15–5	19–5	13–1	
	Girls.	14–10	17–11	13–6	15–2
IB.....	Boys.	14–8	22–3	12–10	
	Girls.	14–4	17–10	13–4	14–6

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CENTRAL HIGH SCHOOL—Continued.

DISTRIBUTION OF PUPILS BY CLASSES AND COURSES.

CLASS.		College Preparatory.	General.	Totals.	
Post-Graduate	Boys.	9	1	10	
	Girls.	7	5	12	22
IIIA	Boys.	25	3	28	
	Girls.	23	18	41	69
IIIB	Boys.	31	4	35	
	Girls.	36	19	55	90
IIA	Boys.	29	5	34	
	Girls.	30	30	60	94
IIB	Boys.	40	5	45	
	Girls.	54	23	77	122
IA	Boys.	50	14	64	
	Girls.	36	23	59	123
IB	Boys.	91	20	111	
	Girls.	75	24	99	210
	Boys.	275	52	327	
	Girls.	261	142	408	780
Totals		536	194	780	

TECHNICAL HIGH SCHOOL.

DISTRIBUTION OF PUPILS BY AGES AND CLASSES, SEPTEMBER 30, 1921.

CLASS.	AGE.	13	14	15	16	17	18	19	20	21	Totals.	
Post-Graduate	Boys.				2	3	4			1	10	
	Girls.				1		3		1	1	6	16
IIIA	Boys.		1		17	14	22	7	4	1	66	
	Girls.				4	6	4	3		1	18	84
IIIB	Boys.			9	25	21	13	11	2	2	83	
	Girls.			1	5	5	4	2			17	100
IIA	Boys.		1	16	32	32	11	4	2		98	
	Girls.			2	10	13	3				28	126
IIB	Boys.	1	13	37	49	30	4	3	1		138	
	Girls.		2	12	11	8	4	1			38	176
IA	Boys.	6	27	49	39	19	6	1			147	
	Girls.		6	9	6	6	1				28	175
IB	Boys.	13	57	59	41	7	3			2	182	
	Girls.	3	16	23	13	4					59	241
	Boys.	20	99	170	205	126	68	26	9	6	724	
	Girls.	3	24	47	50	42	19	6	1	2	194	918
Totals,		23	123	217	255	168	82	32	10	8	918	

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TECHNICAL HIGH SCHOOL—Continued.

AVERAGE AGES.

CLASS.		Average Age.	Oldest.	Youngest.	Average Age of Class.
Post-Graduate...	Boys.	17–6	21–7	16	
	Girls.	18–5	22–9	16–7	18
IIIA.....	Boys.	17–4	21–9	14–10	
	Girls.	17–5	21–6	16–11	17–4
IIIB.....	Boys.	17	22–6	15–5	
	Girls.	17	19–7	15–11	17
IIA.....	Boys.	16–5	20–6	14–11	
	Girls.	16–6	18–6	15–11	16–5
IIB.....	Boys.	15–8	20–9	13–11	
	Girls.	16	19–1	14–10	15–9
IA.....	Boys.	15–4	19–6	13–2	
	Girls.	15–5	18–4	14–3	15–4
IB.....	Boys.	14–9	22–6	13–1	
	Girls.	14–9	17–9	13–1	14–9

DISTRIBUTION OF PUPILS BY CLASSES AND COURSES.

CLASS.		Scientific.	College Preparatory.	Industrial.	Totals.	
Post-Graduate.....	Boys.	8	2		10	
	Girls.	6			6	16
IIIA.....	Boys.	32	30	4	66	
	Girls.	14	2	2	18	84
IIIB.....	Boys.	40	40	3	83	
	Girls.	15		2	17	100
IIA.....	Boys.	50	43	5	98	
	Girls.	27		1	28	126
IIB.....	Boys.	62	68	13	138	
	Girls.	31	6	1	38	176
IA.....	Boys.	90	49	8	147	
	Girls.	26		2	28	175
IB.....	Boys.	93	57	32	182	
	Girls.	52	4	3	59	241
	Boys.	375	284	65	724	
	Girls.	171	12	11	194	918
Totals,		546	296	76	918	

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HIGH SCHOOL OF COMMERCE.

DISTRIBUTION OF PUPILS BY AGES AND CLASSES, SEPTEMBER 30, 1921.

CLASS.	AGE.	12	13	14	15	16	17	18	19	20	21 and over.	Totals.	
Post-Graduate....	Boys.					1	6	3			2	12	
	Girls.					5	9	4	2			20	32
IIIA.....	Boys.					3	10	7				20	
	Girls.				2	20	22	11	7			62	82
IIIB.....	Boys.				2	8	9	5	2	1		27	
	Girls.			3	11	30	20	11	2	2		79	106
IIA.....	Boys.				5	8	11	2	3	1		30	
	Girls.			5	21	60	25	5	2			118	148
IIB.....	Boys.			1	7	15	7	3	3		1	37	
	Girls.		2	18	52	55	21	10	1			159	196
IA.....	Boys.			5	11	10	3	3	1			33	
	Girls.		5	26	53	40	11	4				139	172
IB.....	Boys.		1	13	21	15	4	2	1			57	
	Girls.	1	16	84	78	29	5	4	1			218	275
	Boys.		1	19	46	60	50	25	10	2	3	216	
	Girls.	1	23	136	217	239	113	49	15	2		795	1011
Totals,.....		1	24	155	263	299	163	74	25	4	3	1011	

AVERAGE AGES.

CLASS.		Average Age.	Oldest.	Youngest.	Average Age of Class.
Post-Graduate...	Boys.	18–0	29–2	16–10	
	Girls.	17–2	19–6	16–0	17–5
IIIA.....	Boys.	17–2	18–6	16–4	
	Girls.	17–0	19–7	15–11	17–0
IIIB.....	Boys.	17–0	20–1	15–7	
	Girls.	16–6	20–8	14–10	16–7
IIA.....	Boys.	16–9	20–2	15–3	
	Girls.	16–1	19–7	14–8	16–3
IIB.....	Boys.	16–6	21–8	14–3	
	Girls.	15–8	19–11	13–9	15–10
IA.....	Boys.	15–9	19–1	14–7	
	Girls.	15–3	18–10	13–8	15–4
IB.....	Boys.	15–4	19–2	13–9	
	Girls.	14–8	19–4	12–11	14–9

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AVERAGE AGE IN EACH GRADE, SEPTEMBER 30, 1921.

GRADES.	IB.	IA.	IIB.	IIA.	IIIB.	IIIA.	IVB.	IVA.	VB.	VA.	VIB.	VIA.	Junior High Schools.					
													IB.	IA.	IIB.	IIA.	IIIB.	IIIA.
H. S. of Commerce,	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13–10	14–3
Acushnet Avenue,	6–1	6–8	7–5	7–11	8–5	9–6	10–1	10–3	10–9	....	....	....	....	....	....	....	....	....
Alden Street,	6–2	....	6–11	7–6	8–0	9–0	9–1	....	....	....	....	....	....	....	....	....	....	....
Armory Street,	5–10	6–7	6–11	7–7	7–9	8–9	9–1	9–10	10–8	10–11	11–4	12–0	12–8	12–5	....	....	....	....
Barrows,	....	....	....	....	....	....	9–4	9–5	10–11	11–3	11–6	12–5	....	....	....	....	....	....
Boston Road,	6–0	6–2	6–11	7–8	8–2	8–7	9–3	10–5	11–5	10–10	11–9	12–0	....	....	....	....	....	....
Brightwood,	6–2	6–6	6–7	7–9	8–3	8–11	9–7	9–9	10–6	11–0	11–9	12–3	....	....	....	....	....	....
Buckingham,	....	....	....	....	....	....	....	....	....	....	....	....	12–5	12–11	13–2	13–5	14–0	14–8
Carew Street,	6–4	6–11	7–5	8–0	8–2	9–0	9–6	10–3	10–4	10–11	11–4	11–11	....	....	....	....	....	....
Central Street,	5–6	6–4	6–11	7–4	7–11	8–11	9–2	9–6	10–8	11–0	11–5	12–4	12–5	13–0	13–2	13–5	14–3	....
Charles Street,	6–2	6–3	7–1	7–10	7–11	8–11	9–8	....	....	....	....	....	....	....	....	....	....	....
Chestnut Street,	....	....	....	....	....	....	....	....	....	....	....	....	12–6	13–1	13–3	13–0	14–3	14–5
Dry Bridge,	6–6	....	6–7	....	7–6	9–0	8–9	....	....	....	....	....	....	....	....	....	....	....
Eastern Avenue,	6–1	7–0	7–2	7–7	8–1	9–2	10–0	10–3	10–8	11–1	....	....	....	....	....	....	....	....
East Main Street, I. O.	6–1	6–5	6–11	7–11	8–1	9–5	9–5	10–2	....	....	....	....	....	....	....	....	....	....
East Springfield,	6–1	6–5	7–4	8–6	....	9–0	9–11	10–0	....	....	....	....	....	....	....	....	....	....
East Union Street,	5–11	7–0	6–10	7–6	8–4	8–11	9–7	....	....	....	....	....	....	....	....	....	....	....
Five Mile Pond,	6–2	6–8	7–0	7–10	8–4	....	9–5	....	10–6	13–4	12–1	13–7	....	....	....	....	....	....
Forest Park,	....	....	....	....	....	....	....	....	....	....	....	....	11–11	12–5	13–2	13–6	14–0	14–6
Glenwood,	5–7	6–4	6–8	7–6	7–6	7–7	9–5	9–4	....	....	....	....	....	....	....	....	....	....
Homer Street,	5–5	6–7	6–10	7–5	8–1	9–0	9–2	9–9	10–6	10–6	11–3	11–7	....	....	....	....	....	....
Hooker,	6–4	7–1	7–6	8–4	8–7	9–7	9–4	10–4	11–2	11–5	11–11	12–3	....	....	....	....	....	....
Howard Street,	6–8	7–2	7–5	8–4	8–0	9–8	9–10	10–5	11–1	11–4	12–1	12–7	13–0	13–1	....	....	....	....
Jefferson Avenue,	6–0	6–2	6–5	7–2	8–2	8–8	8–11	9–7	9–10	....	....	....	....	....	....	....	....	....
Kensington Avenue,	5–6	6–3	6–7	7–5	7–8	8–5	9–0	9–7	9–11	10–9	11–0	11–10	....	....	....	....	....	....
Liberty,	5–5	5–8	6–0	6–0	6–11	7–7	8–0	8–3	9–2	9–4	....	....	....	....	....	....	....	....
Lincoln,	5–11	6–4	6–11	7–8	8–3	8–9	9–6	10–0	10–7	10–8	11–3	11–11	....	....	....	....	....	....
Myrtle Street, I. O.	6–1	6–4	7–5	6–8	8–6	9–5	9–5	10–6	10–11	11–10	11–10	12–9	13–3	13–3	13–7	13–11	14–0	14–8
Rushville,	6–9	6–1	7–4	8–2	8–10	9–2	8–7	10–1	10–7	10–7	11–8	....	....	....	....	....	....	....
School Street,	5–8	6–11	7–0	7–6	8–4	9–0	8–8	9–8	9–11	10–9	11–1	11–5	....	....	....	....	....	....
Sixteen Acres,	5–6	7–9	....	....	9–11	....	9–6	....	10–11	....	12–1	....	....	....	12–3	....	....	....
State Street,	....	....	....	....	....	....	....	....	....	....	....	....	12–8	13–2	13–8	13–11	14–5	14–11
Strickland,	6–3	6–6	7–2	7–9	8–2	8–10	....	....	....	....	....	....	....	....	....	....	....	....
Sumner Avenue,	5–10	6–3	6–6	7–2	7–4	8–2	8–11	9–5	9–11	10–3	10–8	11–4	....	....	....	....	....	....
Tapley,	5–10	6–3	6–8	7–3	7–9	8–7	8–11	8–7	10–0	10–8	11–1	11–6	....	....	....	....	....	....
Washington,	5–11	6–3	6–9	7–0	8–0	8–10	8–8	9–9	10–1	11–0	11–1	11–4	....	....	....	....	....	....
White Street,	5–9	6–4	6–9	7–1	8–0	8–10	9–1	9–8	10–10	11–0	10–11	11–5	....	....	....	....	....	....
William Street,	6–2	6–11	7–4	7–10	8–5	....	....	....	....	....	....	....	....	....	....	....	....	....
Worthington Street,	6–5	6–10	7–8	7–8	8–4	8–7	9–6	10–1	11–0	11–1	12–1	12–7	....	....	....	....	....	....
Average,	6–0	6–7	7–0	7–7	8–1	8–10	9–3	9–10	10–6	11–0	11–6	12–1	12–7	12–11	13–2	13–6	14–1	14–6

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TABLE SHOWING THE GRADUAL DROPPING OUT OF PUPILS IN THE VARIOUS GRADES.

NUMBER OF PUPILS IN EACH GRADE.

	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Freshman.	Sophomore.	Junior.	Senior.	Post-Grad.
January, 1891,	1234	766	681	577	511	408	295	260	221					
January, 1892,	1307	893	841	541	522	468	337	245	222					
January, 1893,	1311	1013	918	648	483	477	350	236	230					
January, 1894,	1434	990	996	659	584	505	342	238	248					
September, 1894,	1618	936	1030	795	640	530	350	266	250	174	154	89	63	
September, 1895,	1539	1053	1035	794	724	513	445	277	263	177	126	96	65	
September, 1896,	1723	1030	1180	917	785	621	460	283	256	204	118	86	104	
September, 1897,	1731	1134	1211	980	789	754	474	381	274	206	159	93	88	15
September, 1898,	1775	1145	1287	965	875	657	635	382	299	227	159	123	80	22
September, 1899,	1789	1174	1243	1029	952	786	559	486	380	243	174	130	114	13
September, 1900,	1717	1068	1294	1107	904	884	621	463	380	293	206	142	83	28
September, 1901,	1717	1265	1226	1152	1024	892	759	548	378	298	212	68	104	26
September, 1902,	1685	1297	1276	1088	1135	903	768	655	416	316	214	179	124	27
September, 1903,	1773	1319	1180	1341	1072	986	799	633	464	390	260	172	132	18
September, 1904,	1610	1314	1265	1260	1025	984	912	639	478	433	335	207	121	26
September, 1905,	1663	1293	1271	1266	1140	977	881	661	560	350	248	229	132	16
September, 1906,	1484	1375	1267	1249	1151	1035	941	712	514	509	338	236	185	16
September, 1907,	1565	1348	1283	1221	1203	1059	970	792	593	464	353	272	176	16
September, 1908,	1679	1515	1225	1339	1134	1164	974	914	650	584	363	292	192	38
September, 1909,	1850	1395	1352	1264	1176	1122	995	924	741	638	409	299	225	35
September, 1910,	1774	1404	1402	1303	1200	1148	1052	863	761	694	455	338	181	37
September, 1911,	1731	1543	1373	1347	1300	1076	1058	926	716	729	492	366	226	25
September, 1912,	1968	1397	1465	1311	1352	1189	1035	949	808	696	536	405	238	21
September, 1913,	2218	1677	1481	1423	1347	1345	1162	898	690	787	547	450	277	25
September, 1914,	2305	1789	1593	1451	1367	1350	1327	1046	899	932	631	457	316	39
September, 1915,	2137	1872	1661	1513	1354	1407	1179	1061	1037	930	774	529	348	32
September, 1916,	2233	1865	1809	1709	1477	1453	1211	976	926	936	728	582	356	64

	I.	II.	III.	IV.	V.	VI.	Junior High. I.	Junior High. II.	Junior High. III.	(a) (b)	Senior High. I.	Senior High. II.	Senior High. III.	Post-Grad.
September, 1917,	2491	1963	1858	1857	1731	1488	1420	1196	1051	394 362	728	559	432	68
September, 1918,	2494	2079	1731	1892	1792	1724	1461	1213	1111		1255	523	363	46
September, 1919,	2540	2059	1778	1680	1743	1718	1616	1265	1102		911	963	435	34
September, 1920,	2753	2210	1852	1734	1619	1806	1568	1424	1239		1044	701	705	26
September, 1921,	2306	2305	1984	1811	1746	1617	1733	1501	1464		1196	862	531	70

(a) Junior High School Class in High School of Commerce.
(b) Advanced Freshmen.

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THE SENIOR HIGH SCHOOLS.

The senior high schools are not managed as entirely separate and unrelated institutions. They are so conveniently grouped that interchange of students is easy and economical. Pupils choose courses, not schools. On promotion from the junior high school a pupil decides, with the advice and approval of his parents, what course among those offered in the senior high schools most fully meets his needs. He is then assigned for enrollment to that school in which his entire course, or the greater part of his course, is carried on. To secure certain portions of his work he may need to report for one or more periods each week at a recitation room, laboratory, or gymnasium in one of the other schools, but his assignment for enrollment in a school is decided on the basis of the predominant characteristics of the course which he chooses.

CENTRAL HIGH SCHOOL.

First high school in Springfield; organized, 1841.

Central High School, organized, 1849.

Present building occupied, 1898.

Alumni Association organized, 1854.

Officers of the Alumni Association: President, Frank M. Kinney; vice-president, John W. B. Brand; secretary, Gordon Ireland; treasurer, George J. Clark; executive committee, The Officers and Giles Blague, Mrs. Marion Melius Dickey, Frank G. Hodskins, Harry C. Lapham, Mrs. Walter V. McDuffee, Alice K. Moore, Mrs. George Pirnie, Mrs. Edward H. Wilkinson, Dwight R. Winter.

TECHNICAL HIGH SCHOOL.

Manual training course opened to high school pupils, 1886.

Organized as Mechanics Arts High School, 1898.

Present name adopted, 1904.

Housed in present building and courses in household technology offered for girls, 1906.

Alumni Association organized, 1903.

Officers of the Alumni Association: President, Fred L. Hunn; vice-president, Mrs. Victor Wesson; secretary, Miss Elizabeth Gammons; treasurer, J. Waldo Russell; Directors, Thomas L. Cowles, George Poole, Burton A. Adams.

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HIGH SCHOOL OF COMMERCE.

Organized as a department in Central High School, 1898.

Transferred to Technical High School, 1906.

Organized as High School of Commerce and transferred to Central High School Building, with sessions in the afternoon, 1910.

New building occupied, September, 1915.

Alumni Association organized, February 23, 1917.

Officers of the Alumni Association: President, Chester W. Chambers; first vice-president, Clifford E. Davis; second vice-president, Miss Helen L. Hawthorne; secretary-treasurer, Miss Esther G. Hall; executive committee: Principal Carlos B. Ellis, President Chester W. Chambers, Alfred H. Hastings, Miss Adelaide G. Daly, Miss Ruby A. Holland, Earle E. Carter, Carroll L. Rowe, Thomas L. Goggin, Frank T. Kingman, Miss Margaret C. Coleman, Miss Rachel B. Albert; Trustees of Scholarship Fund: Principal Carlos B. Ellis, Frank A. Schlesinger (3 years), Miss Ethel M. Lutolf (2 years), Miss Margaret E. Ganley (1 year).

TERMS OF ADMISSION TO ALL SENIOR HIGH SCHOOLS.

Pupils are admitted to the senior high schools twice a year. All pupils of the junior high schools who are recommended by the principals of these schools are admitted without examination.

Non-residents are admitted upon passing the required examination and paying a tuition of $180 per year in advance. A special pamphlet containing the courses of study and all other necessary information in regard to these schools is issued separately, and may be obtained by applying to the Superintendent of Schools.

EVENING SCHOOL OF TRADES.

Organized, 1898.

Conducted in Technical High School building, beginning 1906.

TERMS OF ADMISSION.

Tuition in all the classes is free to all persons over fourteen years of age who are residents of Springfield, but a fee for materials and other incidental expenses is charged each member of some classes. Non-residents are also charged the incidental fees. Members are required to be regular in attendance. Persons wishing to join classes must give satis-

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factory references as to character and show evidence of ability to do the work required. Certificates of proficiency are awarded in each course to those who complete that course satisfactorily. The school opens the second week in October and is in operation 24 weeks, closing Thursday and Friday evenings of Thanksgiving week and during the vacation of the Christmas holiday season. The school hours are from 7.15 P. M. to 9.15 P. M.

An engineering course was established in the middle of the season, 1921-22. It is intended to be a three-year course, covering the elementary subjects of engineering training. The work is not confined to one subject, but to both mechanical subjects and the allied academic subjects. The satisfactory completion of the course, extending over three years, will entitle a student to a diploma.

	Tuition	Fee
Automobile Repair and Maintenance	$25	$5
Blue Print Reading	10 (1 night a week)	..
Electricity	20	4
Engineering	25	4
Machine Shop Practice	25	5
Mathematics	20	..
Mechanical Drawing	20	..
Plumbing	25	8
Sheet Metal Work	25	5
Wood Work and Pattern Making	25	5
Design and Applied Arts, including Stenciling, Leather Work, Metal Work, and Pottery	20	3
Cookery	20	3
Millinery	20	2
Sewing and Dressmaking	20	2
Textile and Costume Design	10 (1 night a week)	1

VOCATIONAL SCHOOL.

Organized in Technical High School building, 1908.

In July, 1911, State approval was secured with reimbursement of one half the cost of maintenance and the school was transferred to rented quarters at 36 Taylor street.

Transferred to Pynchon Street School, April, 1914.

Transferred to new building on Spring street, April, 1921.

This school is designed for boys over fourteen years of age, enrolled in the junior high grades.

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LIST OF TEXT BOOKS

AUTHORIZED FOR USE IN THE PUBLIC SCHOOLS.

ELEMENTARY SCHOOLS.

READING.

GENERAL LITERATURE.

AUTHOR.	TITLE.	GRADE.
Æsop	Fables (Stickney)	IV
Andersen	Fairy Tales	V
Andrews	Ten Boys on the Road from Long Ago	VI
Baldwin	Fairy Stories and Fables	III
Baldwin	Fifty Famous Stories	III
Baldwin	Old Greek Stories	IV
Beckwith	In Mythland, Volume I	II
Beckwith	In Mythland, Volume II	III
Bellamy	W onder Children	IV
Bigham	Merry Animal Tales	III
Blaisdell	Boy Blue and his Friends	II
Blaisdell	Child Life Reader, Book I	I
Blaisdell	Child Life Reader, Book II	II
Blaisdell	Child Life Reader, Book III	III
Blaisdell	Pretty Polly Flinders	II
Bryce	Child-Lore Dramatic Reader	II
Burgess	Old Mother West Wind	III
Carroll	Alice's Adventures in Wonderland	V
Carroll & Brooks	Fifth Reader	V
Chambers	Hide and Seek in Forest Land	III & IV
Cook	Story of Ulysses	V
Defoe	Robinson Crusoe (Lambert)	VI
Edson-Laing	Reader, Book I	I
Edson-Laing	Reader, Book II	II
Free & Treadwell	The Primer	I
Ghosh	Wonders of the Jungle	IV
Hawthorne	Wonder Book	VI
Holbrook	Hiawatha Primer	II
Howe	Third Reader	III
Jones	Third Reader	III
Kingsley	Water Babies	V
London	Call of the Wild	VI
Longfellow	Hiawatha	VI
Mace	Lincoln, the Man of the People	VI
Mace	Washington, a Virginia Cavalier	VI
Matthews	Poems of American Patriotism	VI
Morcomb	Red Feather	II
Noyes & Guild	Sunshine Primer	I
Osgood	Folklore Primer	I
Osgood	Sunbonnet Babies Primer	I
Perkins	The Dutch Twins	III
Perkins	The Dutch Twins Primer	I & II
Powers & Balliet	Reader, Book I	I
Powers & Balliet	Reader, Book II	II
Powers & Balliet	Reader, Book III	III

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AUTHOR.	TITLE.	GRADE.
Powers & Balliet	Reader, Book IV	IV
Powers & Balliet	Reader, Book V	V & VI
Pyle	Adventures of Robin Hood	VI
Rice & Ketchum	Our Story Reader	I
Serl	Work-a-day Doings	I
Serl	Work-a-day Doings on the Farm	I
Seton	Wild Animal Ways	VI
Smythe	Reynard the Fox	II
Stevenson	Children's Classics in Dramatic Form	IV
Stockton	Fanciful Tales	V
Swift	Gulliver's Travels	VI
Tappan	The Farmer and his Friends	VI
Van Dyke	The Van Dyke Book (Stories and Poems)	VI
Werthner	How Man Makes Markets	VI
Wiggin	Polly Oliver's Problem	VI
Wiltse	Folklore Stories and Proverbs	II
Wyss	Swiss Family Robinson (Stickney)	VI
Supplementary Books:		
Action, Imitation and Fun Series	Three Bears	I
Action, Imitation and Fun Series	Three Kittens	I
Action, Imitation and Fun Series	Three Pigs	I
Action, Imitation and Fun Series	Red Riding Hood	I
Action, Imitation and Fun Series	Jack the Giant Killer	I
Bolenius	Boys' and Girls' Reader, Book IV	IV
Bolenius	Boys' and Girls' Reader, Book V	V
Bolenius	Boys' and Girls' Reader, Book VI	VI
Bolenius	Elementary Lessons in Everyday English	IV-VI
Chain Stories and Playlets	The Cat That Was Lonesome	I
Chain Stories and Playlets	The Mouse That Lost Her Tail	I
Chain Stories and Playlets	The Woman and Her Pig	I
GEOGRAPHICAL.		
Andrews	Each and All	V
Andrews	Seven Little Sisters	IV
Carpenter	Geographical Reader, North America	VI
Carroll	Around the World, Book 1	II
Carroll	Around the World, Book 2	III
Carroll	Around the World, Book 3	IV
Humphrey	Little Folks of Other Lands	II
Kirby	Aunt Martha's Corner Cupboard	IV
Muir	Stickeen	V
Schwatka	Children of the Cold	V
Shaw	Big People and Little People of Other Lands	III
HISTORICAL.		
Eggleston	Stories of Great Americans	IV
Ellson & Macmullan	Story of Our Country	IV
Pratt	Legends of the Red Children	VI
Smythe	Old Time Stories	II
Tanner	Legends from the Red Man's Forest	V
ELEMENTARY SCIENCE.		
Cooke	Nature Myths	III
Lewis	The Waterboys and Their Cousins	VI
Long	Ways of Wood Folk	V
	LANGUAGE.	
Chancellor	Graded City Speller, Fifth Year	V
Chancellor	Graded City Speller, Sixth Year	VI
Driggs	Live Language Lessons	IV

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ARITHMETIC.

AUTHOR.	TITLE.	GRADE.
Hoyt & Peet	Everyday Arithmetic, Book I	III & IV
Hoyt & Peet	Everyday Arithmetic, Book II	V & VI
Nichols	New Graded Lessons in Arith., Book I	II
Nichols	New Graded Lessons in Arith., Book II	III
Nichols	New Graded Lessons in Arith., Book III	IV
Nichols	New Graded Lessons in Arith., Book IV	V
Nichols	New Graded Lessons in Arith., Book V	VI

GEOGRAPHY.

Tarr & McMurry	New Geography, First Book, Part I	IV
Tarr & McMurry	New Geography, First Book, Part II	V
Tarr & McMurry	New Geography, Second Book, Part I	VI

HISTORY.

Beard & Bagley	A First Book in American History	V
Gordy	American Leaders and Heroes	V
Gordy	American Beginnings in Europe	VI

PHYSIOLOGY.

O'Shea & Kellogg	Health Habits	VI

MUSIC.

Aitken	Two Part Exercises	IV
Congdon	Music Primer	III
Dann	First Year Music	I
Dann	Second Year Music	II
Dann	Third Year Music	III
Dann	Fourth Year Music	IV
Dann	Fifth Year Music	V
Shirley	Two Part Songs for Intermediate Grades	IV & V
Silver, Burdett Co.	Progressive Music Reader, Book I	I & II
Silver, Burdett Co.	Progressive Music Reader, Book II	III & IV
Zuchtman	New American Music Reader, Book II	III & IV
Zuchtman	New American Music Reader, Book III	V & VI

PENMANSHIP.

Houston	Writing Lessons	I-IV

DICTIONARY.

Webster	Shorter School Dictionary	IV-VI

JUNIOR HIGH SCHOOLS.

ENGLISH.

Aldrich	Story of a Bad Boy	I
de Amicis	The Heart of a Boy	I
Antin	At School in the Promised Land	II
Arnold	Sohrab and Rustum / Ancient Mariner	III
Baker	Children's Third Book of Poetry	I
Bemis, Hols & Smith	Patriotic Reader	II

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AUTHOR.	TITLE.	JUNIOR HIGH.
Browning	Cavalier Tunes	III
Bryant	Iliad	III
Bryant	Odyssey	III
Carpenter	Geographical Reader, Europe	I
Carpenter	Geographical Reader, Asia	I
Clemens	Travels in History	I
Clemens	Travels at Home	I
Coe	Heroes of Everyday Life	I
Cooper	The Spy	I
Dickens	Christmas Carol, etc.	I
Dickens	Tale of Two Cities	III
Emerson & Bender	English Spoken and Written, Book II	II
Grenfell	Adrift on an Ice Pan	I
Hale	Man Without a Country	II
Hawthorne	Grandfather's Chair	I
Hawthorne	Tanglewood Tales	I
Hayward	Money, What It is and How to Use It	II
Homer	Odyssey	III
Howells	Boy Life	I
Hughes	Tom Brown's School Days	III
Kipling	Captains Courageous	I
Kipling	Kipling Stories and Poems Every Child Should Know	I
Longfellow	Tales of a Wayside Inn	II
Longfellow	Selections	I
Martineau	Peasant and Prince	II
McMurry	William Tell Dramatic Reader	I
Miller & Palmer	High School English	I-III
Repplier	A Book of Famous Verse	II
Scott	Ivanhoe	II
Scott	Kenilworth	II
Scott	Lady of the Lake	III
Scott	Lay of the Last Minstrel	II
Scott	Marmion	II
Scott	The Talisman	II
Scribner's	Stories from American Authors	II
Shakespeare	Julius Cæsar	II
Shakespeare	The Merchant of Venice	III
Shakespeare	Midsummer Night's Dream	III
Spaulding, Brice & Buehler	Aldine Third Language Reader	I & II
Stevenson	Kidnapped	II
Stevenson	Treasure Island	I
Sykes	English Composition for Grammar Grades	III
Tappan	Diggers in the Earth	I
Tappan	Makers of Many Things	I
Tappan	Travelers and Traveling	II
Washington	Up from Slavery	II
Webster	English for Business	III
Webster	Shorter School Dictionary	I-III
Whittier	Snowbound	I
Wilson & Winship	The Merrill Speller, Book II	I-III

MATHEMATICS.

Atwood	Exercises in Algebra	III
Hoyt & Peet	Everyday Arithmetic, Book III	I-III
Meservey	Bookkeeping	II
Nichols	New Graded Lessons in Arithmetic, Book VI	I
Spencer	Inventional Geometry	II
VanTuyl	Essentials of Business Arithmetic	III
Wells & Hart	First Year Algebra	II
Wells & Hart	New High School Algebra	III

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GEOGRAPHY.

AUTHOR.	TITLE.	JUNIOR HIGH.
Dryer	Elementary Economic Geography	II
Frye-Atwood	New Geography, Book II	I
Morton	Advanced Geography	I

SCIENCE.

Lewis	The Waterboys and Their Cousins	I

PHYSIOLOGY.

O'Shea & Kellogg	Making the Most of Life	I

HISTORY.

Fiske	War of Independence	I
Gibson	Chart History of the Civil War	I
Gordy	History of the United States	I & II
Scudder	George Washington	I
Tappan	England's Story	I

FRENCH.

Chapuzet & Daniels	Mes Premiers Pas en Français	II & III
Foa	Le Petit Robinson	III
Gay	Chansons, Poésies et Jeux Français	III
Meras	Le Premier Livre	III

GERMAN.

Bagster-Collins	First Book in German	II
Fick	Dies und Das	II & III
Gerstacher	Germelshausen	III
Gronow	Für Kleine Leute	II
Müller & Wenckebach	Glück Auf	II & III
Walter & Krause	Beginners' German	II

LATIN.

Smith	Latin Lessons	II & III
Smith	Supplement to Smith's Latin Lessons	II & III

MUSIC.

Armitage	Laurel Junior Songs
Armitage	Laurel Songs (Student's Edition)
Armitage	Laurel Unison Book
Dann	Junior Songs
Farnsworth	Grammar School Songs
Giddings & Newton	Junior Song and Chorus Book
Tomlins	Laurel Music Reader
Tomlins	Laurel Unison Book for Girls
Tomlins	Laurel Unison Book for Boys
Zuchtman	New American Music Reader, Book IV

PENMANSHIP.

Zaner	Writing Manual, No. 144	III
Zaner & Bloser Co.	Zaner Method Writing, Compendium No. 4	I
Zaner & Bloser Co.	Zaner Method Writing, Compendium No. 5	II

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SENIOR HIGH SCHOOLS.

CLASSICS.

Text-Books:

AUTHOR.	TITLE.
Allen & Greenough	Cæsar
Allen & Greenough	Latin Grammar
Arms	A Latin Dictionary for High School Students
Barss	Cornelius Nepos
Burgess & Bonner	Elementary Greek
D'Ooge	Latin Composition
D'Ooge	Select Orations of Cicero
Fairclough & Brown	Æneid
Gleason	Greek Prose Composition
Greenough & Kittredge	Virgil
Hadley & Allen	Greek Grammar
Harper	Latin Dictionary
Keep	Homer's Iliad (Books I-VI)
Kelsey	Cæsar, Gallic Wars
Kelsey	Cicero
Kelsey	Ovid
Kelsey	Xenophon's Anabasis
Kirtland	Fabulæ Faciles
Smith	Latin Lessons

Supplementary Book:

Barss	Third Year Latin for Sight Reading
Collar	Gate to Cæsar
Pearson	Essentials of Latin
Towle & Jenks	Cæsar for Sight Reading

ENGLISH.

Text-Books:

Addison	Sir Roger de Coverley Papers
Alshouse & Root	A Brief English Grammar
Ashmun	Modern Prose and Poetry for Secondary Schools
Bartholomew & Hurlbut	The Business Man's English
Berdan, Schults and Joyce	Modern Essays
Bouton	Lincoln and Douglas Debate
Brooks	English Composition, Book I, Enlarged
Brooks & Hubbard	Composition Rhetoric
Browning	Shorter Poems
Buehler	Exercises in English
Burke	Speech on Conciliation with America
Burns	Representative Poems with Carlyle's Essay
Canby & Opdycke	Elements of Composition
Carlyle	Essay on Burns
Clark	A Treasury of War Poetry
Coleridge	Ancient Mariner
Davis & Getchell	Stories of the Day's Work
De Quincey	English Mail Coach
Eliot	Silas Marner
Emerson	American Scholar
Emerson	Culture, Books, Power
Esenwein	Children's Stories and How to Tell Them
Foster	Essentials of Exposition and Argument
Foerster & Steadman	Sentences and Thinking
Fuess	Selected English Letters
Fulton	Roosevelt's Writings
Gardner	A New Robinson Crusoe
Gayley & Young	English Poetry, Its Principles and Progress
Goldsmith	Vicar of Wakefield

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AUTHOR.	TITLE.
Halleck	History of American Literature
Halleck & Barbour	Readings from Literature
Hart & Perry	Representative Short Stories
Hitchcock	Enlarged Practice Book in English Composition
Hitchcock	New Practice Book
Hitchcock	Rhetoric and the Study of Literature
Hughes	Tom Brown's School Days
Husband	America at Work
Husband	Americans by Adoption
Lockwood	The Freshman and his College
Long	American Poems
Long	English Literature
Lowell	Vision of Sir Launfal
Macaulay	Lays of Ancient Rome
Macaulay	Essays on Milton and Addison
Milton	Shorter Poems
Milton	Paradise Lost
Pace	Readings in American Literature
Painter	Introduction to American Literature
Palmer	Self-Cultivation in English
Parkman	The Oregon Trail
Pope	Rape of the Lock
Reeves	Argumentation and Debate
Richards	High Tide (selected poems)
Rittenhouse	Little Book of Modern Verse
Scott & Denney	Composition-Rhetoric
Simonds	Student's History of English Literature
Speare & Norris	Vital Forces in Current Events
Spencer	News Writing
Stevenson	Kidnapped
Stewart & Tilley	The French Romanticists
Tanner	Essays and Essay Writing
Tennyson	Idylls of the King
Tennyson	The Princess
Thompson	British Verse
Webster	Bunker Hill Oration
Webster	English for Business
Wiggin	Golden Numbers
Williams	Choice Literature, Book VII
Winchester	Book of English Essays
Woolley	Handbook for Composition
Wordsworth	Shorter Poems

Supplementary Books:

Aldrich	Story of a Bad Boy
Arnold	Sohrab and Rustum
Blackmore	Lorna Doone
Brewer	Oral English
Browning	Lady Geraldine, Selected Poems
Bryant	Selections
Bryce	Selected Essays
Byron	Childe Harold
Carlyle	Heroes and Hero Worship
Chaucer	Prologue to Canterbury Tales
Cooper	The Last of the Mohicans
De Quincey	Joan of Arc
Dickens	A Tale of Two Cities
Eliot	Education for Efficiency
Foerster & Pierson	American Ideals
Franklin	Autobiography
Gardiner, Kittredge & Arnold	Composition and Rhetoric

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AUTHOR.	TITLE.
Gaskell	Cranford
Gayley	Classic Myths
Gayley & Flaherty	Poetry of the People
George	From Chaucer to Arnold
Goldsmith	She Stoops to Conquer
Goldsmith	Deserted Village
Guerber	Myths of Greece and Rome
Hale	Man Without a Country
Harte	Selected Short Stories
Hawthorne	Twice Told Tales
Hawthorne	House of Seven Gables
Holmes	Selections from Breakfast Table Series
Hotchkiss & Drew	Business English
Howells	Rise of Silas Lapham
Irving	Life of Oliver Goldsmith
Irving	Alhambra
Irving	Selections from Sketch Book
Jewett	Night before Thanksgiving
Keller	The Story of My Life
Lamb	Essays from Elia
Lamb	Tales of Shakespeare
Laselle	Short Stories of the New America
Lockwood & Emerson	Composition and Rhetoric
Long	History of English Literature
Macaulay	Essay on Warren Hastings
Macaulay	Essays on Addison and Johnson
Macaulay	On Life of Samuel Johnson
Mallory	King Arthur Stories
Merrill, C. E., & Co.	Selected Short Stories
Nettleton	Old Testament Stories
Palgrave	Golden Treasury
Poe	Poems and Tales
Riis	The Making of an American
Ruskin	Selected Essays and Letters
Ruskin	Sesame and Lilies
Schurz	Abraham Lincoln
Scott	Quentin Durward
Scott, Foresman & Co.	Types of the Short Story
Shakespeare	A Midsummer Night's Dream (Rolfe)
Shakespeare	As You Like It (Longmann)
Shakespeare	Hamlet (Rolfe) (New Hudson)
Shakespeare	Julius Cæsar (Rolfe) (Edited by Thurber)
Shakespeare	King John (Rolfe)
Shakespeare	King Henry IV (Part I) (Rolfe)
Shakespeare	King Henry IV (Part II) (Rolfe)
Shakespeare	King Henry V (Rolfe)
Shakespeare	King Lear (Rolfe)
Shakespeare	King Richard II (Rolfe)
Shakespeare	King Richard III (Rolfe)
Shakespeare	Macbeth (Pattee)
Shakespeare	Macbeth (Rolfe)
Shakespeare	Merchant of Venice (Rolfe)
Shakespeare	Othello (Rolfe)
Shakespeare	Romeo and Juliet
Shakespeare	Tempest (Rolfe)
Shakespeare	Twelfth Night (Rolfe) (Edited by Kellogg)
Shelley & Keats	Selections
Sheridan	Rivals
Sherman	Short Stories
Simonds	American Literature (Student's History of)
Stedman	American Anthology
Stevenson	Travels with a Donkey and Inland Voyage
Stevenson	Treasure Island

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AUTHOR.	TITLE.
Tennyson	Shorter Poems
Thackeray	The Newcomes
Washington	Farewell Address
Webster	Secondary Dictionary

FRENCH.

Text-Books:

About	Le Roi des Montagnes
Bacon	New French Course
Bacon	Une Semaine à Paris
Basin	Le Blé qui Lève
Basin	Les Oberle
Bierman & Frank	Conversational French Reader
Bounet	French Syntax and Composition
Bowen, ed.	Modern French Lyrics
Bruce	Dictées Françaises
Bruce	Grammaire Française
Bruno	Le Tour de la France
Buffum	French Short Stories
Camerlynck	France—Première Année de Français
Cameron	French Prose Composition
Comfort	French Composition
Constanseau	French Dictionary
Corneille	Le Cid
Daudet	La Belle Nivernaise
Daudet	Le Petit Chose
Daudet	Tartarin de Tarascon
de Sauze	Cours Pratique de Français pour Commencants
de Sauze & True	Grammaire Française
Desnoyers	Les Mésaventures de Jean-Paul Choppart
Dike	Scientific French Reader
Dumas	La Tulipe Noire
Enault	Le Chien du Capitaine
Erckmann–Chatrian	Madame Thérèse
Feuillet	Le Roman d'un Jeune Homme Pauvre
Foa	Le Petit Robinson de Paris
François	Advanced French Composition
François	Alternate Exercises for Introductory French Prose Composition
François	Beginner's French
François	Introductory French Prose Composition
François & Giroud	Simple French
Fraser	Scenes of Familiar Life
Fraser & Squair	Shorter French Course
Goodell	L'Enfant Espion
Guerber	Contes et Légendes
Guerber	Prisoners of the Temple
Halevy	L'Abbé Constantin
Heath	French-English and English-French Dictionary
Hennequin	Lessons in Idiomatic French
Hugo	La Chute
Hugo	Les Misérables
Hugo	Quatre-vingt-treize
Josselyn & Talbot	Elementary Reader of French History
La Bedollière	La Mère Michel et Son Chat
Labiche & Martin	La Poudre aux Yeux
Labiche & Martin	Le Voyage de M. Perrichon
La Fontaine	Fables
Lamartine	Jeanne d'Arc
Larousse	Dictionaire
Larousse	Grammaire Complète
Lavisse	Histoire de France

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AUTHOR.	TITLE.
Levi	French Phrases and Questions
Loti	Pêcheur d'Islande
Mairet	La Tâche du Petit Pierre
Malot	Sans Famille
Marique & Gilson	French Sight Reading
McLaughlin	French-English Dictionary
Méras	Le Premier Livre
Mérimée	Colomba
Molière	L'Avare
Molière	Le Bourgeois Gentilhomme
de Monvert	La Belle France
de Musset	L'Histoire d'un Merle Blanc
Pargment	Exercices Français, Première Partie
Pattoi	Causeries en France
Rogers	French Sight Reading
Sand	La Mare au Diable
Sandeau	Mlle. de la Seiglière
Sandeau	Sacs et Parchemins
Sarcey	Le Siège de Paris
Smith & Greenleaf	A French Reader
Snow & Lebon	Easy French
Souvestre	L'Eclusiér
Souvestre	Un Philosophe sous les Toits
Spiers & Surenne	French Dictionary
Super	French Reader
Talbot	French Composition
Theuriet	L'Abbé Daniel
Tuckerman	Simplicité
Verne	Tour du Monde en Quatre-vingts Jours
Worman	Grammaire Française

Supplementary Books:

Ballard	Short Stories for Oral French
Balzac	Le Curé de Tours
Beaumarchais	Le Barbier de Séville
Bercy	Le Français Pratique
Bruce	French Selections for Sight Translation
Coppée	Le Luthier de Crémone et Le Trésor
Dumas	Les Trois Mousquetaires
Duval	Petite Histoire de la Littérature Française
Erckmann-Chatrian	Le Conscrit de 1813
Fortier	Histoire de France
Fortier	Sept Grands Auteurs
Foncin	Le Pays de France
Kuhn	French Readings for Beginners
Legouvé & Labiche	La Cigale chez les Fourmis
Mairet	L'Enfant de la Lune
de Musset	Trois Comédies
de Ruy, Rachel	Rondes Enfantines
Sand	La Famille de Germandre
Syms	Easy French Reader
Syms	Le Chien de Brisquet
Talbot	Le Français et Sa Patrie
Topffer	La Bibliothèque de Mon Oncle
Zola	La Débâcle

GERMAN.

Text-Books:

Anderson	Bilderbuch ohne Bilder
Arnold	Ein Regentag auf dem Lande
Arnold	Fritz auf Ferien

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AUTHOR.	TITLE.
Bacon	German Composition
Bacon	German Grammar for Beginners
Bagster-Collins	First Year in German
Baumbach	Das Habichtsfräulein
Baumbach	Der Schwiegersohn
Baumbach	Im Zwielicht, Vols. I and II
Chamisso	Peter Schlemihl
Chiles	German Prose Composition
Dippold	Scientific German Reader
Erk	Liederschatz
Ernst	Flachsmann als Erzicher
Freytag	Aus dem Staat Freidrichs des Grossen
Freytag	Karl der Grosse
Fulda	Der Talisman
Gerstacker	Germelshausen
Goethe	Dichtung und Wahrheit
Goethe	Hermann und Dorothea
Goethe	Sesenheim
Greenfield	Brief Summary of German Grammar
Guerber	Märchen und Erzählungen
Hatfield	Materials for German Composition, based on Höher als die Kirche
Heath	German Dictionary
Heine	Die Harzreise
Heyse	L'Arrabbiata
von Hillern	Höher als die Kirche
Holzwarth	Grüss aus Deutschland
Jagemann	German Prose Composition
Kayser & Monteser	Foundations of German
Keller	Kleider machen Leute
Klenze	Deutsche Geschichte
Kohlrausch	Das Jahr 1813
Leander	Traumereien
Lessing	Minna von Barnhelm
Moltke	Die Beiden Freunde
Mondan	German Selections for Sight Translations
Muller & Wenckebach	Glück Auf
Münchausen	Reisen
Otis	Das Lied der Glocke
Pope	German Composition
Riehl	Der Fluch der Schonheit
Schiller	Das Lied der Glocke
Schiller	Der Neffe als Onkel
Schiller	Jungfrau von Orleans
Schiller	Thirty Years' War (Book III)
Schiller	Wilhelm Tell
Stolze	Bunte Geschichten
Seidel	Die Monate
Seidel	Leberecht Hühnchen
Seidel & Rosegger	Edle Herzen
Stifter	Das Heidedorf
Storm	Geschichten aus der Tonne
Storm	Immensee
Stroebe und Whitney	Geschichte der Deutschen Literatur
Thomas	German Grammar
Tuckerman	Am Anfang
Vos	Essentials of German
Wells	Drei kleine Lustspiele
Wenckebach, ed.	Die Schönsten Deutschen Lieder
Whitney & Stroebe	Easy German Composition
von Wildenbruch	Das Edle Blut

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Supplementary Books:

AUTHOR.	TITLE.
Auerbach	Brigitta
Bacon	Im Vaterland
Benedix	Nein
Bernhardt	Novelletten Bibliothek
Bernhardt	Stille Wasser
Bierwirth	Words of Frequent Occurrence
Ebner-Eschenbach	Krambambuli
Freytag	Aus dem Jahrhundert des Grossen Krieges
Frommel	Eingeschneit
Gore	German Science Reader
Groller	Inkognito
Heyse	Anfang und Ende
Heyse	Das Mädchen von Treppi
Keller	Bilder aus der Deutschen Literatur
Lessing	Nathan der Weise
Meissner	Aus Meiner Welt
Moser	Der Bibliotekar
Moser	Willkommen in Deutschland
Schurz	Lebenserinnerunger
Spyri	Rosenresli (ed. Boll)
Sudermann	Teja
Zschokke	Der zerbrochene Krug

SPANISH

Angell	English-Spanish Dictionary
Coester	A Spanish Grammar
Cool	Spanish Composition
Crawford	Spanish Composition
De Alarcon	El Capitan Veneno
Des Garennes	Introduction a la Lengua Castellana
De Vitis	A Spanish Grammar for Beginners
Dorado	Espana Pintoresca
Fuentes & Francois	A Trip to Latin America
Harrison	Spanish Commercial Reader
Harrison	Intermediate Spanish Reader
Hartsenbusch	Juan de Las Vinas
Hills	Spanish Tales for Beginners
Howland	Zaragueta
Luria	Correspondencia Commercial
McHale	Commercial Spanish
McKay	Spanish, Commercial and Professional
Roessler & Remy	First Spanish Reader
Selgas	La Mariposa Blanca
Sparkman	Industrial Spanish
Supple	Spanish Reader of South American History
Umphrey	Spanish Prose Composition
Valera	El Pajara Verde
Velasquez	English-Spanish Dictionary
Wagner	Spanish Grammar

HISTORY.

Text-Books:

Andrews	A History of England
Ashley	American Government
Ashley	Medieval Civilization
Ashley	New Civics
Bogart	Economic History of the United States
Botsford	A History of Greece

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AUTHOR.	TITLE.
Botsford	A History of Rome
Botsford	History of Ancient World
Breasted	Ancient Times,—A History of the Early World
Bryce	American Commonwealth
Burch	American Economic Life
Burch & Nearing	Elements of Economics
Channing	Student's History of the United States
Cheyney	History of England
Coman	Industrial History of United States
Emerton	Introduction to the Middle Ages
Forman	Advanced American History
Guitteau	Government and Politics in the U. S.
Hazen	Modern European History
McLaughlin	American Nation
McMurry	Geography of the Great War
Monro	Middle Ages
Moore	Industrial History of the American People
Muzzey	American History
Myers	Ancient History
Myers	General History
Myers	Greece
Myers	Rome; Its Rise and Fall
Oman	A History of Greece
Osgood	History of Industry
Robinson	Medieval and Modern Times
Robinson & Beard	Development of Modern Europe
Robinson & Beard	Outlines of European History, Part II
Robinson & Breasted	Outlines of European History, Part I
Smith	Commerce and Industry
Thompson	Elementary Economics
Thorndike	History of Medieval Europe
Towne	Social Problems
Webster	Ancient History
West	History of the American People
West	Modern History
West	Modern World
West	The War and the New Age
Westerman	Story of the Ancient Nations
Supplementary Books:	
Adams	European History
Cheyney	Readings in English History
Church	Greek Life and Story
Church	Stories from Herodotus
Church	Stories of the Persian Wars
Fiske	Civil Government in the United States
Goodspeed	History of the Ancient World
Hart	Source Book of American History
Hopkinson	Greek Leaders
Larned	History of England
Mackenzie	The Nineteenth Century
Montgomery	Leading Facts of French History
Montgomery	Leading Facts in English History
Myers	Mediæval and Modern History
Schurz	Abraham Lincoln
Sheldon	General History
Webster	History of Commerce
Wilson	The State
Witt	Retreat of the Ten Thousand
Woodburn & Moran	American History and Government
Wright	Industrial Evolution of the United States
Wrong	History of the British Nation
	Municipal Register of Springfield

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MATHEMATICS.

Text-Books:

AUTHOR.	TITLE.
Atwood	Exercises in Algebra
Hawkes	Advanced Algebra
Hunn & MacInnes	Logarithmic Tables
Jameson	Elementary Practical Mechanics
McCurdy	Exercise Book in Algebra
Merriman	Strength of Materials
Phillips & Strong	Elements of Trigonometry
Rivenburg	A Review of Algebra
Robbins	Plane Trigonometry
Robbins and Somerville	Exercises in Algebra
Schultze & Sevenoak	Plane Geometry
Smith	Course in Geometry
Stone & Millis	Elementary Algebra
Wells	Algebra for Secondary Schools
Wells	College Algebra
Wells	Plane Trigonometry with Tables
Wells & Hart	First Year Algebra
Wells & Hart	New High School Algebra
Wentworth	Elements of Algebra
Wentworth	Plane and Solid Geometry
Wentworth	Plane Trigonometry
Wentworth & Hill	Logarithmic Tables
Wentworth & Smith	Plane Geometry
Wentworth & Smith	Solid Geometry

Supplementary Books:

Crawley	Table of Logarithms
Fine	College Algebra
Holton	Shop Mathematics
Longmans	School Mensuration
Schulze	Elementary Algebra
Sheperd	Problems in Strength of Materials
Wentworth	College Algebra
Wentworth & Smith	Plane Trigonometry

SCIENCE.

Text-Books:

Adams	First Course in Physics
Allyn	Elementary Applied Chemistry
Atkinson	Lessons in Botany
Bergen & Davis	Laboratory and Field Manual of Botany
Black & Conant	Practical Chemistry
Black & Davis	Practical Physics
Brownlee	Chemistry of Common Things
Brownlee	First Principles of Chemistry
Butler	Household Physics
Carhart & Chute	High School Physics
Colton	Briefer Course in Physiology
Comstock	Astronomy
Dryer	Physical Geography
Fairbanks	Physiography
Gager	Fundamentals of Botany
Hessler	First Year Science
Hobbs & Elliott	Gasoline Automobile
Hough & Sedgwick	Elements of Hygiene and Sanitation
Irish	Qualitative Analysis
Jackson	An Elementary Book on Electricity and Magnetism
Kinne & Cooley	Foods and Household Management

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AUTHOR.	TITLE.
Kinne & Cooley	Shelter and Clothing
Miller	Progressive Problems in Physics
Morgan and Lyman	Chemistry
Newell	Descriptive Chemistry
Newell	Experimental Chemistry
Norton	Food and Dietetics
Packard	Everyday Physics
Peabody	Studies in Physiology
Remsen	Elements of Chemistry
Remsen	Briefer Course
Sheaffer	Household Accounting
Smith	Elementary Chemistry
Taber	The Business of the Household
Tarr	New Physical Geography
Williams	Healthful Living
Supplementary Books:	
Bailey	Sanitary and Applied Chemistry
Chittenden	Nutrition of Man
Conn	Bacteria, Yeasts, and Molds in the Home
Coulter	Plant Relations
Coulter	Plant Structures
Gray	Botany
Hortvet	Elementary Practical Physics
Milliken & Gale	First Course in Physics
Olsen	Pure Foods
Richards	Chemistry of Cooking and Cleaning
Sherman	Chemistry of Food and Nutrition
Walters	Physiology and Hygiene

MECHANICAL DRAWING

Text-Books:	
Anthony & Ashley	Descriptive Geometry
Hoffman	Elementary Machine Design

MUSIC.

Birchard	55 Songs for Community Singing
Birchard	School Song Book
Birchard	Standard Songs No. 7
Dann	School Hymnal
Educational Music Bureau	Assembly Hymn and Song Collection
McConathy	The School Song Book
Tomlins	The Laurel Song Book

COMMERCIAL.

Text-Books:	
Atwood	Investment Handbook
Babson	Bonds and Stocks
Bennett	Bookkeeping and Accounting Exercises, Part I
Bennett	Bookkeeping and Accounting Exercises, Part II
Brisco	Fundamentals of Salesmanship
Bullock	Introduction to Study of Economics
Cahill & Ruggeri	Office Practice
Coman	Industrial History of United States
Cutler & Sorrelle	Rational Typewriting
De Haas	Business Organization and Administration
Eldridge	Business Speller
Eldridge	Shorthand Dictation Exercises
Ellis	Practical Bookkeeping

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AUTHOR.	TITLE.
Emery	Every Day Business
Fritze-Eldridge	Expert Typewriting
Gano	Commercial Law
Gilbert & Brigham	Introduction to Physical Geography
Greever & Jones	The Century Handbook of Writing
Gregg	Graded Readings
Gregg	Shorthand Manual
Gregg	Speed Studies
Hall	Writing an Advertisement
Herrick	History of Commerce
Holdsworth	Money and Banking
Kennard	Department Store Merchandise Manuals
Klein	Elements of Accounting
Knox	Science and Art of Selling
Leigh	The Human Side of Retail Selling
McClelland	Office Training and Standards
McCord	A Textbook of Filing
Moore	Commercial Arithmetic
Norton	Retail Selling
Pitman	Course in Isaac Pitman Shorthand
Pitman	Progressive Dictator
Pitman	Selections from American Authors
Poates	Complete Atlas of the World
Raymond	Modern Business Writing
Rowe, H. N., Co.	A Course in Cost Accounting
Shaw, A. W., Co.	Personal Efficiency in Business
Smith	Commerce and Industry
Thompson	Elementary Economics
Van Tuyl	Complete Business Arithmetic
Van Tuyl	Essentials of Business Arithmetic
Webster	General History of Commerce
Williams & Rogers	Bookkeeping and Business Practice
Zaner & Bloser	Arm Movement Writing Manual No. 144
Supplementary Books:	
Opdycke & Drew	Commercial Letters
Shaw, A. W., Co.	How to Talk Business to Win
Smith	Proof Reading and Punctuation
Webster	Little Gem Dictionary
Wilson	South America as an Export Field
Wilson & Carpenter	Analysis of Financial Statements

JUNIOR COLLEGE.

CLASSICS

Text-Books:	
Allen & Greenough	Latin Grammar
Burgess & Bonner	Elementary Greek
Burton	Selections from Livy
Egbert	Cicero, De Senectute
Gleason	Greek Prose Composition
Hadley & Allen	Greek Grammar
Harvard Latin Department	Selections from Latin Poets
Kelsey	Xenophon's Anabasis
Lewis	Elementary Latin Dictionary
Shorey & Laing	Horace

ENGLISH.

Cunliffe, Pyre & Young	Century Readings in English Literature
Hersey & Greenough	English Composition

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AUTHOR.	TITLE.
Lomer & Ashmun	Story and Practice of Writing English
Manly & Rickert	The Writing of English
Rice	College and the Future

FRENCH

Text-Books:

Corneille	Le Cid
France	Le Crime de Sylvestre Bonnard
Fraser & Squair	French Grammar
Gautier	Jettatura
Hugo	Poems (Schinz edition)
Mansion	Extraits des Prosateurs Français
Molière	Le Tartuffe
Musset	Trois Comédies
Racine	Athalie
Schinz	Seventeenth Century French Readings

Supplementary Books:

Corneille	Horace
Corneille	Le Cid
Corneille	Polyeucte
Doumic	Histoire de la Littérature Française
Fortier	Histoire de France
LaFayette	La Princesse de Cleves
Molière	Les Précieuses Ridicules
Racine	Andromaque
Racine	Britannicus

GERMAN.

Text-Books:

Bernstorff	Handbook of German Composition
Boesinger	Zweites Aufsatsbuch
Fulda	Das verlorene Paradise
Goethe	Egmont
Hauff	Lichenstein
Hebble	Agnes Bernauer
Klenze	Deutsche Gedichte
Meyer	Der Schuss von der Kanzel
Raabe	Elsa von der Tanne
Raabe	Eulenpfingsten
Schiller	Maria Stuart
Schiller	Wallenstein
Sudermann	Der Katzensteg

Supplementary Books:

Boesinger	Mündliche und shcriftliche Uebungen
Goethe	Iphigenie auf Taurus
Heyse	Das Mädchen von Treppi
Keller	Kleider machen Leute
Morgan	Elementary German Syntax
Sudermann	Frau Sorge
von Wildernbruch	Lachendes Land

SPANISH

Text-Books:

Morrisson	Tres Comedias Modernas
Olmsted & Gordon	Abridged Spanish Grammar
Selgas	La Mariposa Blanca
Umphrey	Spanish Prose Composition
Wilkins & Luria	Lecturas Fáciles

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HISTORY.

Text-Books:

AUTHOR.	TITLE.
Hasen	Modern European History
Robinson	History of Western Europe
Thorndike	History of Medieval Europe
Zugblin	American Municipal Progress

MATHEMATICS.

Phillips & Strong	Plane Trigonometry
Robbins	Plane Trigonometry
Wells	Plane Trigonometry
Wentworth & Smith	Solid Geometry
Wentworth & Smith	Logarithmic Tables

SCIENCE.

Milliken & Gale	A First Course in Physics
Waterman	Laboratory Manual in Physics

Supplementary Books:

Kimball	College Physics

EVENING HIGH SCHOOL.

MATHEMATICS.

Text-Books:

Ellis	Practical Bookkeeping
Moore & Miner	Concise Business Arithmetic
Nichols	Arithmetical Problems
Rittenhouse & Clapp	Accounting Theory and Practice
Schultz	Elements of Algebra
Wells	Higher Algebra
Wentworth & Smith	Trigonometry

SCIENCE.

Allen	Elementary Applied Chemistry
Carhart & Chute	First Principles of Physics
Carhart & Chute	High School Physics
Irish	Qualitative Analysis for Secondary Schools
Williams	Essentials of Chemistry

GERMAN.

Bagster-Collins	First Book in German

FRENCH.

Bacon	Une Semaine à Paris
Ballard	Short Stories for Oral French
Bierman & Frank	Conversational French Reader
Comfort	French Prose Composition
François	Introductory French Prose Composition
Fraser & Squair	Shorter French Course
Grandgent	French Composition
Guerber	Contes et Légendes

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AUTHOR.	TITLE.
Halévy	L'Abbé Constantin
Mérimé	Colomba
Syms	Easy French Reader
Talbot	Le Français et sa Patrie
Tuckerman	Simplicité
	SPANISH.
Isaacs	Maria
Legundo	El Lector Americano
Morse	Spanish-American Life
Worman	First Year Spanish
	ENGLISH.
Aldrich	Story of a Bad Boy
Chancellor	Standard Short Course
Dickens	Tale of Two Cities
Eldridge	Business Speller
Eliot	Silas Marner
Elson & Macmullan	Story of Our Country
Field & Coveney	English for New Americans
Goldsmith	Plays of Oliver Goldsmith
Hale	Man Without a Country
Hitchcock	New Practice Book
Hitchcock	Rhetoric and Study of Literature
Hotchkiss & Drew	Business English
Irving	Sketch Book
Longfellow	Evangeline, etc.
Longfellow	Tales of a Wayside Inn
Lowell	Vision of Sir Launfal
Poe	Poems and Tales
Scott	Ivanhoe
Scott	Quentin Durward
Shakespeare	Macbeth
Shakespeare	Merchant of Venice
Stevenson	Treasure Island
Sykes	English Composition for Grammar Schools
Wallach	Secondary Book in English for Foreigners
Webster	English for Business
Webster	Shorter School Dictionary
Whittier	Snowbound, Tent on the Beach, and Favorite Poems
Williams	Choice Literature
Wood	Practical Grammar and Composition
	HISTORY.
Gordy	History of the United States
	GEOGRAPHY.
Atwood	New Geography, Book II
Carpenter	Geographical Reader—North America
Morton	Advanced Geography
	COMMERCIAL LAW.
Aughenbaugh	Selling Latin America
Gano	Commercial Law
Guitteau	Government and Politics in the United States

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STENOGRAPHY.

AUTHOR.	TITLE.
Pitman	Progressive Dictator
Pitman	Shorthand, Rapid Course
Reigner	Dictation Courses in Business Literature
Sorrelle	Rational Typewriting

ELEMENTARY EVENING SCHOOLS.

Any day school book may be used and, in addition, the following:

Alexander	Spelling Book
Bryce	Folk-lore from Foreign Lands
Chancellor	Standard Short Course for Evening Schools
Cowles	Robinson Crusoe Reader
Field and Coveney	English for New Americans
Mints	New American Citizen
Moley & Cook	Lessons in Democracy
O'Brien	English for Foreigners
Ryan & Prior	How to Learn English
White	Intermediate Arithmetic
Wood	Practical Grammar and Composition

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LOCATION OF PUBLIC SCHOOLS AND TERRITORIAL BOUNDARIES OF THE DISTRICTS

CENTRAL HIGH SCHOOL.—On the south side of State street, between School and Maple streets.

District: The whole city.

HIGH SCHOOL OF COMMERCE.—On the south side of State street, between Walnut and Myrtle streets, and opposite U. S. Armory.

District: The whole city.

TECHNICAL HIGH SCHOOL.—On the east side of Elliott street.

District: The whole city.

VOCATIONAL SCHOOL.—32 Spring street.

District: The whole city.

CONTINUATION SCHOOL.—95 Main street.

ACUSHNET AVENUE ELEMENTARY SCHOOL.—On the east side of Main street, corner of Acushnet avenue.

For grades I. to III., this district is bounded on the north by Loring and Central streets (not including them); on the east by the Central street district; on the south by Nos. 49 and 50 on Long Hill street and 1189 on Main street.

For grades IV. and V., the northern boundary of this district is Fremont and Central streets (including them); on the east and south the same as for primary grades.

ALDEN STREET ELEMENTARY SCHOOL.—Alden street, near the junction of Walnut and Hancock streets.

This district extends from the junction of Hancock and Central streets along Hancock to Florence street; along Florence (not including it) to Pine; Pine to Cedar; along Cedar, James, and King streets to Nelson street; along Nelson and Greene streets (not including these two streets) to Eastern avenue; along Eastern avenue (not including it) to Manhattan street; along Manhattan street (not including it) to Walnut street; along Walnut to Hickory, and along Hickory to the junction of Hancock and Central streets.

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Pupils living on Alden street east of Nos. 78 and 85 attend the Eastern avenue school.

ARMORY STREET ELEMENTARY SCHOOL.—On the west side of Armory street a short distance north of its junction with Liberty street.

This district is bounded on the south by the Boston and Albany railroad; on the west by Webster, Franklin, and Cass streets (not including them); on the north by Van Horn Park; on the east by Kendall avenue, Penacook avenue, and St. Lawrence avenue (not including them). Pupils of grades V., VI., and Junior I. in the Liberty School district attend this school.

BARROWS ELEMENTARY SCHOOL.—On the southeast corner of Oak and Tyler streets, near the junction of Oak and Walnut streets.

This district extends from the Boston and Albany railroad southerly along Federal street (not including it) and Walnut street to Pine; along Pine street to Ashley; Ashley (not including it) to Hancock; along Alden street (not including it) to the New England railroad; along the New England railroad to Wilbraham road; along Wilbraham road to State street; through the middle of State street to Magazine street; along Magazine and Armory streets to the Boston and Albany railroad (including Armory street court).

The section bounded by Hickory street, Watershops pond, King street (including these streets), and the New England railroad is also included in this district.

BOSTON ROAD ELEMENTARY SCHOOL.—On the north side of Boston road, a little east of Jasper street, about three and one half miles from Court Square.

This district is bounded on the west by Balis street (including it); on the south by the north branch of Mill river; on the east by Morton avenue (not including it); Bay street (including it) to the Boston and Albany railroad. There is no northern boundary fixed.

BRIGHTWOOD ELEMENTARY SCHOOL.—Northeast corner of Plainfield street and Talcott avenue.

The eastern boundary is the Boston and Maine railroad. The southern boundary is West street.

BUCKINGHAM JUNIOR HIGH SCHOOL.—On the southeast corner of Eastern avenue and Wilbraham road near Winchester Park.

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Pupils of Junior High grades living in the Homer street and Tapley districts, attend Buckingham school.

NOTE.—Pupils in the Tapley district living west of Harvard street and north of St. James avenue may attend the State street school at the option of their parents.

Children of the Barrows district north of King street (including it) and east of Oak and Walnut streets (not including them) attend the Buckingham school in Junior High grades.

CAREW STREET ELEMENTARY SCHOOL.—On the south side of Carew street, near Main street.

This district is bounded on the north by Morgan street (not including it), Ringgold street (including it), Massasoit place (not including it); on the east by Cass street (numbers north of 120); on the south by Linden street (not including it), Essex street (including it), Auburn street (not including it); on the west by Fulton street from No. 127 to the railroad bridge.

CENTRAL STREET JUNIOR HIGH AND ELEMENTARY SCHOOL.—Corner of Central and Spruce streets.

This district extends from the U. S. Watershops westerly along Mill river to the junction of Mill and Locust streets; along Mill to Pine street; thence in a straight line to the junction of Maple and Central; Central to Cedar to Ashley; along Ashley to Alden, and along Alden to the New England railroad. This district also includes Madison avenue and Sterns terrace.

Pupils of grades I. to IV., inclusive, residing in that part of the Alden street district which lies within the boundaries of the Central street district, attend the Alden street school.

Pupils of grades I. to V., inclusive, residing in that part of the Eastern avenue district which lies within the boundaries of the Central street district, attend the Eastern avenue school.

Pupils of Junior High grades, residing in that part of the Barrows district bounded by Pine and Walnut streets (including them), and King street (not including it) easterly to Bonnyview avenue attend the Central street school.

CHARLES STREET ELEMENTARY SCHOOL.—On the north side of Franklin street, opposite Charles street.

This district is bounded on the north by Linden street (including it); on the east by Cass street (including it south of Linden), Franklin and

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Webster streets (including them); on the south by the Boston and Albany railroad; on the west by Chestnut street (including the east side only).

CHESTNUT STREET JUNIOR HIGH SCHOOL.—On the east side of Chestnut street, near Prospect street.

This district includes all the territory in the northern part of the city, the southern boundary being the Boston and Albany railroad.

Pupils of Junior I. grade, residing in that part of this district which is included in the Armory street district, attend the latter school.

DRY BRIDGE UNGRADED SCHOOL.—On St. James circle, near St. James avenue.

This district is bounded on the south by the Boston and Albany railroad; on the west by Eddy street (not including it); and on the east by the East Springfield school district.

EASTERN AVENUE ELEMENTARY SCHOOL.—On the corner of Eastern avenue and Alden street.

This district is bounded on the north by King street, from Nelson street to its easterly terminus; on the west by Nelson street from King to Greene street, thence the boundary line extends along Greene street to Eastern avenue; along Eastern avenue to Manhattan street; along Manhattan to Walnut; along Walnut to Hickory; along Hickory east to Bonnyview avenue. All the foregoing streets, except Walnut, are included in this district.

EAST FOREST PARK PORTABLE ELEMENTARY SCHOOL.—On the southeast corner of Whittum avenue and Allen street.

This district is bounded on the north by Plumtree road (including it and Harmon avenue); on the west by the N. Y., N. H. & H. railroad. No southern and eastern boundaries are fixed. Grades V. and VI. in this district are included in Washington and White street school districts.

EAST MAIN STREET ELEMENTARY SCHOOL.—Main street, Indian Orchard.

This district includes that section of Indian Orchard (for grades I. to IV.-B only) lying east of the railroad and north of Briggs street.

EAST SPRINGFIELD ELEMENTARY SCHOOL.—On Ardmore street.

This district is bounded as follows: Carew street, east of Cottage street; Cottage street to El Paso street; El Paso street to St. James boulevard; St. James boulevard to Page boulevard; Page boulevard southerly to Athol branch railroad.

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EAST UNION STREET ELEMENTARY SCHOOL.—On the north side of Union street, between Hancock street and Eastern avenue.

This district extends from the New England railroad westerly along Wilbraham road and the middle of State street to Hancock; along Hancock to King street; along King street (not including it) to the railroad; along the railroad to Wilbraham road.

FIVE MILE POND ELEMENTARY SCHOOL.—Corner of Boston road and Parker street.

This district is bounded on the east by the City line; on the north by the B. & A. railroad to Parker street, along Parker street to Briggs street and Briggs street to the railroad (including both of these streets), the B. & A. railroad to Brandon avenue; on the west by Brandon avenue (not including it) and Arlington avenue (including it). No southern boundary is fixed.

FOREST PARK JUNIOR HIGH SCHOOL.—On Oakland street, between Sumner avenue and Garfield street.

All the children of Junior High grades, living in the Sumner avenue, Kensington avenue, Washington and White street school districts, attend this school.

GLENWOOD ELEMENTARY SCHOOL.—On the north side of Springfield street, near its junction with Armory street, and near the Chicopee line.

HOMER STREET ELEMENTARY SCHOOL.—On Homer street, between State street and Wilbraham road.

This district is bounded on the west and south by the Tapley, East Union street, and Eastern avenue school districts; on the north by the Boston and Albany railroad and the Tapley district; on the east by a line drawn from the Boston and Albany railroad through Balis street (not including it).

HOOKER ELEMENTARY SCHOOL.—70 Franklin street.

This district is bounded on the north by Auburn street (including it), Essex street (not including it); on the east by Chestnut street (including the west side only, numbers south of 372) to Sharon street; on the south by the Boston and Albany railroad; on the west by Fulton street. This district includes Sharon street to Nos. 135 and 136 (not including them), Ferry street to Nos. 169 and 172, and Liberty street to No. 76 (including them).

Pupils of the Charles street district attend the Hooker School for grades above IV.-B.

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HOWARD STREET ELEMENTARY SCHOOL.—On the south side of Howard street.

This district is bounded on the north by Bridge street (not including it between Main and Chestnut streets); on the east by Chestnut and Maple streets (not including these streets) from Bridge street to Union street; on the south by Union street.

Children of grades VI. and VII. living in the Acushnet avenue school district and children of grades IV.-A to VII. living in the William street school district also attend this school.

All the streets mentioned above are included in this district, except when otherwise stated.

Mill street and the easterly half of Central street, between Main and Maple streets, are regarded as belonging to Central street district for those who prefer it on account of its nearness.

JEFFERSON AVENUE ELEMENTARY SCHOOL.—On the south side of Jefferson avenue, corner of North street.

This district is bounded on the north by Sheldon and Calhoun streets, and Chapin terrace (not including them). No eastern boundary is fixed for this district. On the south the district is bounded by Massasoit place (including it), 482 Chestnut street (including that number), Ringgold street (not including it), 1160 North street (not including it), and 1141 (including it), and Morgan street (including it); on the west by Plainfield street (not including it) and Birnie avenue (including it) to Sheldon street.

KENSINGTON AVENUE ELEMENTARY SCHOOL.—On the south side of Kensington avenue, between Earl and Oakland streets.

This district is bounded on the north by Mill River; on the east by White, Wareham, Orange, Pasadena, and Pomona streets (not including them); on the south by Grenada terrace and Dickinson street (including them) to the junction of Belmont avenue, Belmont avenue (including it) to Marengo Park; on the west by Marengo Park and Dickinson street (including them) to Mill river. (All of Alderman street is included in this district.)

LIBERTY ELEMENTARY SCHOOL.—On north side of Carew street, between Alvin and Judson streets.

This district is bounded on the north by the Chicopee Falls line, Champlain and Thornfell streets (including them); on the east by Eddy street; on the west by Kendall avenue, Penacook avenue, and St. Lawrence avenue (including them); on the south by the Boston and Albany railroad.

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LINCOLN ELEMENTARY SCHOOL.—On the west side of Chestnut street, between Harriet and Cumberland streets.

This district is bounded on the west by the Boston and Maine railroad; on the south by Sheldon and Calhoun streets, and Chapin terrace (including them), no boundaries being fixed for the northern and eastern sides of this district.

Pupils of grades V.-A and VI. from Jefferson avenue district attend this school.

MYRTLE STREET JUNIOR HIGH AND ELEMENTARY SCHOOL.—At the corner of Worcester and Myrtle streets, Indian Orchard.

This district includes Indian Orchard, except grades I. to IV.-B inclusive, in the East Main street district, and grades I. to VI.-B in the Five Mile Pond district.

RUSHVILLE PORTABLE ELEMENTARY SCHOOL.—On the south side of Dewey street, near Berkshire avenue.

This district extends on the east from Superior street; along Lake Drive; across the Boston and Albany railroad; along Brandon avenue to Boston road; along Boston road to Arlington avenue; along Arlington avenue (not including it) to north branch of Mill river. The southern boundary is the north branch of Mill river. The western boundary is along Morton avenue and Bay street (not including Bay street) to Boston and Albany railroad. There is no northern boundary fixed.

SCHOOL STREET ELEMENTARY SCHOOL.—Southeast corner of School and High streets.

This district is bounded on the north by Pearl street (not including it); on the west by Chestnut and Maple streets, from Pearl to Avon place; on the south by Avon place, Mulberry and Union streets to Walnut, and on the east by Walnut and Federal streets to Pearl (not including them), including the streets mentioned, except when otherwise stated.

SIXTEEN ACRES UNGRADED SCHOOL.—Near Sixteen Acres pond, and near the junction of Wilbraham road and Plumtree road, about six miles from Court Square.

STATE STREET JUNIOR HIGH SCHOOL.—Sessions are held in the afternoon in the Central High School building.

This school is for pupils of Junior High grades, residing in that part of the Barrows district west of Bowdoin street (not including it) and west of and including Oak and Walnut streets to Pine streets. It further includes pupils of Junior II. and III. from the Howard street district,

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and all Junior High pupils from that part of the Worthington street district south of the railroad.

Pupils of Junior High grades residing in the School street district also attend this school.

Pupils of Junior High grades, living in that part of the Tapley district west of Harvard street and north of St. James avenue, may attend the State street school at the option of their parents.

STRICKLAND ELEMENTARY SCHOOL.—On the southwest corner of Oak and Union streets

From the Boston and Albany railroad along Armory street and Worthington (including Armory street court); Worthington to Magazine; along Magazine to State; through the middle of State street easterly to Hancock; along Hancock (not including it) to King; along King and James streets (not including these streets) to Cedar; along Cedar (not including it) to Pine; along Pine to Walnut; along Walnut and Federal streets to the Boston and Albany railroad.

SUMNER AVENUE ELEMENTARY SCHOOL.—On the south side of Sumner avenue between Beechwood avenue and Long Hill street.

This district is bounded on the north by the Acushnet avenue district and Mill river; thence the line extends along Dickinson street to Marengo Park; along Marengo Park to Belmont avenue; along Belmont avenue (not including any of these streets) to Sumner avenue; through the middle of Sumner avenue to Forest Park avenue; through Forest Park avenue, Washington road, Washington boulevard, and Forest Park to Pecousic station.

TAPLEY ELEMENTARY SCHOOL.—On the southwest corner of Bay and Sherman streets.

This district extends from the Boston and Albany railroad along Bowdoin street to Worthington; along Worthington westerly to Magazine street; along Magazine (not including it) to State; through the middle of State street easterly to the New England railroad; along this railroad to Burr street; Burr to Oak Grove avenue; Oak Grove avenue to Bay; along Bay street to the Boston and Albany railroad (including Aster, Goldenrod, Arbutus, and Baywood streets); along the Boston and Albany railroad to Bowdoin street.

Children of the Dry Bridge and East Springfield districts attend the Tapley school for grades V. and VI.

WASHINGTON ELEMENTARY SCHOOL.—On the corner of Woodlawn avenue and Washington street.

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This district is bounded on the west by Forest Park and Continental avenue; thence the line extends through the middle of Sumner avenue to Dickinson street; along Dickinson street and Grenada terrace (not including them), Pomona street (not including it), and Sumner avenue (including the south side of the street). No eastern and southern boundaries are fixed for this district.

Children of Grades I. to IV. living in that part of the Washington school district which is included in the East Forest Park school district attend the latter school.

WHITE STREET ELEMENTARY SCHOOL.—On the west side of White street corner of Scott street.

This district is bounded on the west by White, Wareham, Orange, Pasadena, and Pomona streets (including them); on the south by Sumner avenue (including the north side of it). No part of Alderman street is included in this district. No eastern and northern boundaries are fixed for this district.

Children of Grades I. to IV. living in that part of the White street school district which is included in the East Forest Park school district attend the latter school.

WILLIAM STREET ELEMENTARY SCHOOL.—On the south side of William street between Main and Water streets.

This district is bounded on the north by Union street (not including it); on the east by Maple street (not including it); on the south by Loring and Central streets (including these streets).

WORTHINGTON STREET ELEMENTARY SCHOOL.—On the south side of Worthington street, east of Spring street.

This district includes, north of the Boston and Albany railroad, pupils of grades I. to VI., inclusive, living on Sharon street east of Nos. 135 and 136 (including them), on Ferry street east of Nos. 169 and 172 (not including them), and on Liberty street east of No. 76 (not including it), and pupils living on the west side of Chestnut street, south of Sharon street.

On the south side of the Boston and Albany railroad, the boundary line for grades I. to VI., inclusive, extends along the Connecticut river to Bridge street, to Chestnut, including Bridge street only from Main to Chestnut; thence along Chestnut to Pearl, along Pearl to Federal, and along Federal to the Boston and Albany railroad, all the streets named being included.

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STATISTICS OF THE SPRINGFIELD HIGH SCHOOLS.

CENTRAL HIGH SCHOOL

Year.	Number of Pupils.	Number of Graduates.	Year.	Number of Pupils.	Number of Graduates.
1849	158		1886	379	43
1850	170		‡1887	372	61
1851	185		1888	370	52
1852	159		1889	344	61
1853	170		1890	345	45
1854	176		1891	391	56
1855	186		1892	408	52
*1856	166	9	1893	429	53
1857	156	14	§1894	468	53
1858	172	14	1895	483	51
1859	166	17	1896	484	58
1860	173	25	1897	525	86
1861	163	13	1898	569	83
1862	177	17	1899	622	70
1863	174	15	1900	657	124
1864	162	5	1901	704	84
1865	146	21	1902	751	103
1866	137	10	1903	763	111
1867	148	12	1904	890	120
1868	195	16	1905	975	133
†1869	217	2	1906	1002	158
1870	207	14	‖1907	730	130
1871	181	19	1908	697	112
1872	172	24	1909	771	132
1873	185	21	1910	767	120
1874	201	20	1911	813	91
1875	246	16	1912	831	118
1876	336	33	1913	813	117
1877	354	27	1914	855	131
1878	407	51	1915	924	126
1879	426	54	1916	971	135
1880	405	58	1917	989	139
1881	372	46	°1918	952	169
1882	346	44	1919	827	140
1883	322	42	1920	843	141
1884	322	49	1921	915	267
1885	348	34			

TECHNICAL HIGH SCHOOL.

1899	18		1911	669	60
1900	61		1912	791	52
1901	77	2	1913	857	78
1902	90	3	1914	956	93
1903	120	16	1915	1,031	115
1904	162	18	1916	1,068	101
1905	180	13	1917	1,002	98
1906	223	14	°1918	869	131
‖1907	681	66	1919	807	108
1908	787	78	1920	830	111
1909	928	65	1921	964	172
1910	1,051	88			

HIGH SCHOOL OF COMMERCE.

1911	480	40	1917	1,206	140
1912	547	69	°1918	1,124	143
1913	579	68	1919	1,104	143
1914	688	81	1920	1,150	197
1915	841	89	1921	1,159	275
1916	1,047	124			

*Previous to this date there were no graduating exercises.

†The course was changed this year from three to four years.

‡This was the first year that any pupils were graduated in the two years' Business Course.

§The Business Course was abolished after 1894.

‖The Commercial Department was transferred from Central High to Technical High in September, 1906.

°There were no entering classes in September, 1917, due to the change in the grading system whereby the senior high course was changed from four years to three years.

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EXPENDITURES, SCHOOL POPULATION AND ENROLLMENT.

From the Organization of the City in 1852.

Year.	Current Expenses.	Repairs and Alterations.	New Buildings.	School Census.	Enrollment.	Aver. No. Belonging
1852	$6,558 89	.....	.....	2,188	2,270	1,549
1853	13,257 31	.....	.....	2,253	2,273	1,642
1854	15,049 89	.....	.....	2,449	2,561	1,621
1855	16,451 22	.....	.....	2,641	2,409	1,769
1856	17,501 08	.....	.....	2,606	2,441	1,815
1857	18,727 67	$4,146 81	$6,403 47	2,525	2,459	1,824
1858	18,494 40	3,144 54	671 00	2,675	2,569	1,862
1859	18,315 77	2,939 82	1,553 16	2,505	2,546	1,855
1860	18,115 04	3,532 04	.....	2,472	2,594	1,934
1861	17,961 30	2,956 24	.....	2,688	2,752	1,959
1862	19,358 06	2,601 92	.....	3,090	3,027	2,133
1863	22,361 56	939 55	.....	3,341	3,808	2,342
1864	29,941 54	5,662 30	10,645 90	3,709	3,753	2,298
1865	37,242 93	5,516 10	53,969 78	3,713	3,822	2,490
1866	48,542 28	5,728 90	59,062 72	3,846	3,675	3,187
1867	54,423 56	3,718 32	41,267 84	4,225	3,760	3,266
1868	66,544 60	7,529 04	62,270 59	4,141	4,029	3,304
1869	68,524 83	7,778 57	34,285 49	4,156	4,617	3,509
1870	73,636 97	4,027 70	12,444 57	4,232	4,679	3,822
1871	79,489 26	4,096 28	28,490 00	4,167	4,901	3,717
1872	92,286 88	5,086 27	71,202 63	4,331	4,853	3,674
1873	96,389 77	16,760 80	53,095 82	4,399	5,238	3,900
1874	110,066 43	16,545 76	69,979 01	4,712	5,448	4,071
1875	115,788 04	21,958 95	17,098 73	5,668	5,743	4,296
1876	106,949 96	5,221 48	.....	5,408	5,890	4,481
1877	89,489 74	2,938 91	.....	5,375	5,877	4,615
1878	83,087 62	1,708 02	.....	5,379	5,625	4,298
1879	81,780 65	2,528 04	.....	5,524	5,636	4,475
1880	83,053 74	7,497 14	1,169 69	5,865	5,834	4,538
1881	88,267 73	9,240 86	.....	6,285	5,981	4,667
1882	92,061 29	9,088 23	.....	6,452	6,054	4,727
1883	98,624 26	10,672 68	17,228 99	6,566	6,070	4,661
1884	107,523 95	10,159 73	7,664 96	6,583	5,520	4,327
1885	111,851 90	7,490 23	1,626 17	6,390	5,665	4,517
1886	109,990 53	7,021 26	.....	6,472	5,813	4,648
1887	115,749 65	9,399 94	19,053 56	6,516	5,841	4,643
1888	124,739 06	9,348 20	30,712 40	6,416	5,922	4,647
1889	134,938 12	9,314 65	39,072 98	6,935	6,165	4,962
1890	146,488 62	16,208 53	48,943 67	7,054	6,455	5,180
1891	157,644 68	17,630 70	76,052 19	7,134	7,214	5,128
1892	163,570 40	10,447 98	13,829 18	7,318	7,805	5,585
1893	173,298 48	11,549 10	26,814 01	7,716	8,357	5,799
1894	184,592 41	10,995 75	46,562 87	8,002	8,553	6,340
1895	198,620 20	13,647 77	26,756 82	8,041	8,962	6,661
1896	219,531 84	8,911 17	43,878 11	8,307	9,670	7,074
1897	239,679 72	16,096 06	238,196 30	8,814	9,494	7,869
1898	265,158 05	38,881 39	363,249 04	9,202	10,044	8,260
1899	302,854 35	12,706 09	71,783 82	9,738	10,786	9,072
1900	321,804 66	11,437 20	81,698 41	10,251	11,261	9,300
1901	339,677 59	24,030 85	94,340 94	10,405	11,574	9,612
1902	351,999 63	13,167 60	96,268 67	10,899	12,162	10,206
1903	369,317 47	15,438 28	100,385 33	11,490	12,542	10,290
1904	399,399 68	17,847 52	87,274 88	11,738	12,842	10,818
1905	400,821 51	18,216 94	256,946 05	*13,059	13,161	11,183
1906	424,437 43	20,671 47	149,771 35	*13,359	13,601	11,372
1907	†373,330 38	†21,552 30	†123,727 70	*13,786	13,796	11,516
1908	485,064 25	25,613 77	139,180 18	*14,091	14,451	12,378
1909	509,693 30	26,425 33	46,449 47	*14,335	14,968	12,806
1910	546,894 49	29,136 91	43,141 00	*14,659	15,576	13,024
1911	599,246 97	23,458 83	88,861 00	*15,221	16,074	13,550
1912	640,527 83	35,716 10	42,087 33	*15,915	16,584	13,847
1913	696,066 06	37,072 32	235,401 52	*16,855	17,492	14,563
1914	‡769,435 20	‡41,002 78	‡891,761 02	*17,480	18,696	15,935
1915	856,279 15	36,979 03	243,441 01	*18,129	19,329	16,632
1916	921,220 24	65,635 85	163,463 98	.....	20,197	17,159
1917	1,038,136 10	57,363 18	362,255 98	*20,018	20,975	17,986
1918	1,185,301 09	47,843 27	343,408 97	*21,434	22,047	18,585
1919	1,390,919 10	46,787 81	472,083 13	*22,793	22,405	18,860
1920	1,837,378 97	78,044 44	532,295 88	*22,661	22,648	19,320
1921	2,123,384 41	104,081 97	257,221 23	*23,371	23,628	20,534

*From five to sixteen years of age. †Expenditures are for 11 months.
‡Expenditures are for 13 months, except for teachers' salaries, which are for one year.

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TABLE GIVING A BRIEF DESCRIPTION OF SCHOOL PROPERTY.

BUILDINGS.	No. of Regular Schoolrooms.	No. of Portable Schoolrooms.	No. of Desks and Seats.	No. of Kindergartens.	No. of Recitation Rooms.	Special Rooms.					Assembly Halls.	Gymnasiums.	Wood or Brick.	No. of Stories.	Condition.	Date of Occupation.	Heating Apparatus.	Area Lots. (Square Feet.)
						Manual Training or Shop.	Drawing.	Cooking.	Sewing.	Laboratories.								
Central High	17	..	842	..	12	3	1	1	1	7	2	1	B	3	Good	1898	Steam	79,874
High School of Commerce	49	..	1,726	..	4	2	2	3	3	2	1	2	B	3	Good	1915	Steam	129,480
Technical High	20	..	856	..	..	11	5	1	2	7	1	1	B	3	Good	1906	H. W.	103,201
Vocational	5	..	187	..	..	5	3	..	..	..	1	..	B	2	New	1921	H. W.	.....
Continuation	7	..	165	..	..	4	..	1	1	..	..	..	B	3	Good	1866	Steam	33,407
Acushnet Avenue	12	..	478	1	1	1	..	..	..	..	..	..	B	2	Good	1896	Steam	33,680
Alden Street	4	..	159	..	..	..	..	..	..	..	..	..	B	2	Good	1890	Steam	19,765
Armory Street	20	..	826	1	..	1	..	1	..	..	..	..	B	2	Good	1901	Steam	56,700
Barrows	11	..	454	..	..	1	..	..	..	..	1	..	B	3	Good	1868	Steam	57,498
Boston Road	4	1	195	..	..	..	..	..	..	..	..	..	W	2	Good	1899	H. A.	22,500
Brightwood	17	..	536	1	..	..	..	..	..	..	..	..	B	2	Good	1899	Steam	87,120
Buckingham	24	..	991	..	4	3	2	2	2	..	1	†2	B	2	Good	1891	H. A.	94,570
Carew Street	13	..	556	1	1	..	..	..	..	..	..	..	B	2	Good	1894	H. A.	35,911
*Carlisle	1	..	.....	..	..	..	..	..	..	..	..	..	B	2	.....	.....	Stove	17,192
Central Street	18	..	709	1	1	1	..	1	1	..	..	..	B	3	Good	1871	Steam	55,460
Charles Street	4	..	181	..	..	..	..	..	..	..	..	..	B	2	Good	1890	Steam	9,856
Chestnut Street	38	..	1,584	..	1	6	2	2	2	1	1	1	B	3	Good	1903	Steam	138,794
Dry Bridge	1	1	35	..	..	..	..	..	..	..	..	..	W	1	Good	1881	Stove	11,530
Eastern Avenue	7	..	280	1	1	..	..	..	..	..	..	..	B	2	Good	1899	H. A.	27,560
East Main Street, I. O.	4	3	274	1	1	..	..	..	..	..	..	..	W	2	Good	1898	H. A.	30,122
East Springfield	..	2	70	..	..	..	..	..	..	..	..	..	W	1	Good	1920	Stove	35,000
East Union Street	7	..	295	1	1	..	..	..	..	..	..	..	B	2	Good	1876	Steam	24,296
Five Mile Pond	2	..	76	..	..	..	..	..	..	..	..	..	B	2	Good	....	Stove	18,887
Forest Park	30	..	1,142	..	..	5	..	2	2	3	1	2	B	3	Good	1899	Steam	120,118
Glenwood	4	..	75	..	..	..	..	..	..	..	..	..	B	2	Good	1903	Steam	43,656
Homer Street	20	..	830	1	..	1	..	..	..	..	..	1	B	2	Good	1898	Steam	83,295
Hooker	23	..	869	1	..	1	..	1	..	..	1	1	B	2	Good	1918	Steam	55,582
Howard Street	24	..	994	1	..	2	..	1	1	..	1	..	B	2	Good	1906	Steam	71,210
Jefferson Avenue	11	..	454	1	..	..	..	..	..	..	..	..	B	2	Good	1889	Steam	20,003
Kensington Avenue	16	..	660	1	..	..	..	..	..	..	..	..	B	2	Good	1909	Steam	110,330
Liberty	8	..	332	..	..	..	..	..	..	..	1	..	B	2	Good	1918	Steam	135,000
Lincoln	17	..	712	..	..	1	..	..	..	..	..	..	B	2	Good	1910	Steam	80,713
Myrtle Street, I. O.	21	..	871	1	1	1	1	2	2	..	1	1	B	3	Good	1868	Steam	54,639
Rushville	..	4	160	..	..	..	..	..	..	..	..	..	W	1	Good	1916	Stove	87,120
School Street	4	..	152	..	1	..	..	..	..	..	..	..	B	2	Good	1892	Steam	86,156
Sixteen Acres	2	..	46	..	..	..	..	..	..	..	..	..	B	2	Good	....	Stove	15,056
State Street	..	.	.....	..	..	..	..	..	..	..	..	..	..	..	.....	.....	.....	30,902
Strickland	6	..	252	..	..	..	..	..	..	..	..	..	B	2	Good	1884	H. A.	15,753
Sumner Avenue	11	..	448	1	1	..	..	..	..	..	..	..	B	2	Good	1912	Steam	96,000
Tapley	16	..	664	1	1	..	..	..	..	..	1	..	B	2	Good	1888	Steam	92,626
*Wachogue	1	..	.....	..	..	..	..	..	..	..	..	..	W	1	Fair	....	Stove	8,275
Washington	15	..	580	1	..	..	..	..	1	..	..	..	B	2	Good	1918	Steam	87,120
White Street	10	..	414	1	..	..	..	..	..	..	1	..	B	2	Good	1905	Steam	100,000
Wilbraham Road	..	..	.....	..	..	..	..	..	..	..	..	..	..	..	.....	.....	.....	99,317
William Street	10	..	410	1	..	..	..	..	..	..	..	..	B	2	Good	1901	Steam	35,603
Worthington Street	13	..	535	1	..	..	..	..	..	..	..	..	B	3	Good	1869	Steam	39,756
Storehouse, Emery St	..	..	.....	..	..	..	..	..	..	..	..	..	B	2	Good	1913	Steam	6,806
.....	547	11	22,075	20	31	49	16	18	18	20	15	12	..	..	.....	.....	.....	.....

† Unused. Under Heating Apparatus, H. A.—Hot Air.

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SPRINGFIELD PUBLIC SCHOOLS

RATES OF TUITION FOR NON-RESIDENT PUPILS

DAY SCHOOLS

Senior High,	$180 a year
Vocational,	$17 a month
Junior High,	$120 a year
Grades V and VI,	$72 a year
Kindergarten and Grades I-IV,	$48 a year

EVENING SCHOOLS

High,	$25 for the season
Elementary,	$25 for the season
Trades,	$20 and $25 for the season
Vocational,	90c per lesson

Tuition must be paid in advance.

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LENGTH OF SERVICE OF MEMBERS

OF THE

SPRINGFIELD SCHOOL COMMITTEE

From the Organization of the City in 1852

		Total Years of Service.
Josiah Hooker	1852–1853 (Chairman) 1856–1867 (Chairman) (Also a member in 1851 and Chairman in 1848, before city was chartered)	16
C. A. Winchester	1852–1854 (Also a member in 1851)	4
A. S. McClean	1852–1854 (Also a member in 1851)	4
George Merriam	1852	1
William P. Bagg	1852	1
Marcellus Pinney	1852 1855 1861–1863 1867–1869	8
Samuel Walker	1852	1
Frederick Holt	1852	1
Alfred Lambert	1853	1
V. L. Owen	1853 1856–1859	5
Jabez C. Terry	1853	1
Henry Pomeroy	1853–1854	2
Harvey E. Moseley	1853 and 1855	2
Horace S. Taylor	1854	1
Samuel McNary	1854 (Also a member in 1847 and 1848)	3
George O. Lombard	1854	1
Frederick Holt	1854	1
Chester R. Chaffee	1855	1
John E. Taylor	1855 (Chairman) 1871–1882 (1874–1882 Chairman)	13
Henry R. Vaille	1855	1
Randolph E. Ladd	1855	1

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		Total Years of Service.
Charles P. Bragdon	1855	1
Isaac P. Dickinson	1855	1
William L. Smith	1856 (Also a member in 1849 and 1850)	3
Samuel Osgood	1856–1862 (Also a member in 1849 and 1850)	9
John B. Kirkham	1856	1
Edwin L. Hall	1856–1860	5
John Kimberly	1856–1860	5
Samuel Mills, Jr	1856	1
William G. Breck	1857–1858	2
James E. McIntire	1857–1864	8
Abram Paige	1857–1858	2
E. D. Murphy	1857–1858	2
R. B. Hildreth	1859–1864	6
Charles Marsh	1859	1
Marcus W. Fay	1859–1863	5
Osmond Tiffany	1860–1861	2
Gershom W. Harrison	1860–1862	3
Robert Crossett	1861–1862	2
Francis Tiffany	1862–1864	3
S. G. Buckingham	1863–1877 (1872–1873 Chairman)	15
Horace Kibbe	1863–1870	8
Obadiah Frary	1863	1
J. G. Chase	1864 1876–1881	7
William W. Gardner	1864–1866 1870–1875 1882–1884	12
A. J. Plumer	1864–1865	2
Josiah Marvin	1865–1867	3
William Rice	1865–1882 (1869–1871 Chairman)	18
John L. King	1865–1872	8
John B. Stebbins	1865–1869	5
Hiram Warner	1866–1869	4
Horace J. Chapin	1868	1
J. M. Stebbins	1868–1873	6
Samuel W. Porter	1869–1877	9
Mrs. Randolph E. Ladd	1870	1

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		Total Years of Service.
Charles J. Goodwin	1870–1872	
	1874–1890	20
S. D. Burbank	1871–1872	2
T. M. Brown	1873–1880	8
Stephen Harris	1875	1
A. D. Mayo	1874–1879	5
John Fallon	1874–1875	2
John Giles	1876–1878	3
Sanford Lawton, Jr	1878–1880	3
L. H. Cone	1878–1880	3
A. M. Copeland	1879–1881	3
Joseph C. Pynchon	1880–1882	3
John R. Smith	1881–1886	6
Cornelius S. Hurlbut	1881–1889	9
O. M. Baker	1881–1886	
	(1883–1886 Vice-Chairman)	6
James D. Safford	1882–1889	8
Avery J. Smith	1883–1885	3
George H. Bleloch	1883–1891	
	(1887–1889 Vice-Chairman)	9
Milton Bradley	1883–1885	3
Rawson Hathaway	1885–1890	6
James L. Johnson	1886–1891	6
Edward H. Phelps	1886–1888	3
Adelaide A. Calkins	1887–1898	12
Ellen B. Merriam	1887–1892	6
Harlan P. Stone	1889–1894	
	(1890–1894 Vice-Chairman)	6
Clark W. Bryan	1890–1898	9
William C. Simons	1890–1899	
	(1895–1899 Vice-Chairman)	10
Edward O. Robinson	1891–1892	2
Henry K. Wight	1891–1896	6
Elisha B. Maynard	1892–1897	6
	(1887–1888 Mayor and Chairman)	2
Samuel D. Brooks	1892–1894	3
Rachel B. Jacobs	1893–1904	12
William O. Day	1893–1896	3
James G. Dunning	1895–1897	
	1900–1902	6

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		Total Years of Service.
Adelaide H. Trask	1895–1897 1899–1904	9
Frank N. Seerley	1897–1911	15
Charles Jacobus	1897–1899	3
Oscar B. Ireland	1898–1903 (1900–1903 Vice-Chairman)	6
Willard F. Tripp	1898	1
George D. Weston	1898–1909	12
William F. Ray	1899	1
John A. Hall	1899–1901	3
Franklin A. Latimer	1900 (1915-1922 Vice-Chairman)	1
Frederick E. Hopkins	1900–1908	9
Frank H. Goldthwaite Frederick H. Stebbins	(Mr. Goldthwaite resigned in June, 1901, his place being taken by Mr. Stebbins)	1
Edward H. Wilkinson	1902–1912 (1904–1912 Vice-Chairman)	11
James B. Carroll	1902–1904	3
Francis M. Bennitt	1903–1914 (1913–1914 Vice-Chairman)	12
James A. Bill, Jr	1904–1906	3
James S. Judd	1905–1907	3
Leona M. Peirce	1905–1916	12
Mrs. Newton Morgan	1905–1913	9
Wayland V. James	1907–1921 (1917–1921 Vice-Chairman)	15
William M. Kimball	1908–1910	3
Frederick Harris	1909–1917 (1915 Vice-Chairman)	9
Irving S. Pulcifer	1910–1912	3
Ralph B. Ober	1911-1919	9
George H. Howard	1912–1920	9
Newton M. Hall	1913–1921 (1916 Vice-Chairman)	9
Henry L. Hirsch	1913–1921	6
Florence Clark	1914–1919	6
Edward M. Porter	1917–June 20, 1921	4½
George H. Foss	1918–	
George H. Angell	1920–	
Mrs. Jeanne J. Starr	1920–	
Chester S. McGown	1921–	
Chester T. Neal	July 14, 1921-	

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	Total Years of Service.
Ralph W. Ellis, Jr.....1922–	.....
Frederick A. Bassette.....1922–	.....
Timothy J. Collins.....1922–	.....

The Mayor has been Chairman of the School Committee, ex officio, since 1883:—

H. M. Phillips	1883–1885
Edwin D. Metcalf	1886
Elisha B. Maynard	1887–1888
Edward S. Bradford	1889–1891
Lawson Sibley	1892
Edmund P. Kendrick	1893–1894
Charles L. Long	1895
Newrie D. Winter	1896
Henry S. Dickinson	1897–1898
Dwight O. Gilmore	1899
William P. Hayes	1900–1901
Ralph W. Ellis	1902
Everett E. Stone	1903–1904
Francke W. Dickinson	1905–1906
William E. Sanderson	1907–1909
Edward H. Lathrop	1910–1912
John A. Denison	1913–1914
Frank E. Stacy	1915–1918
Arthur A. Adams	1919–1920
Edwin F. Leonard	1921–

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REPORT

OF THE

SUPERINTENDENT OF PUBLIC BUILDINGS

SPRINGFIELD, MASS., December 29, 1921.

To His Honor, the Mayor, and the City Council.

GENTLEMEN:—I herewith submit for your consideration the annual report of the Superintendent of Public Buildings for the year ending November 30, 1921.

DIVISION OF SCHOOLS.

NEW BUILDINGS.

The Committee on City Property last year asked for plans for a Vocational School to be erected on Spring street. Robert B. Warner was selected as architect in competition with others. The general contract for the erection of this building was let to E. J. Pinney, Inc., plumbing and heating contracts to the J. J. Cotter Company, electrical contract to Collins Electric Company, electric light fixture contract to Charles Hall, Inc., and contract for blower system for removing shavings and sawdust to receptacles outside the building to the A. W. Banister Company. This building was opened and occupied for school work on April 4, 1921. After the completion and occupancy of the building, lunch room equipment was bought and installed in the basement.

On December 13, 1920, the City Council made an appropriation of $800,000 for a Junior High School to be built as an addition to the present Central High School, on the site of the former State Street Junior High School. Plans for this building were prepared by Harry L. Sprague, architect, and approved by the Committee on City Property and the School Committee on May 26, 1921. Bids were advertised for, the successful bidders being: general contract, Fred T. Ley & Company, Inc.; plumbing contract, M. A. Dame & Son Company; heating contract, Wyckoff & Lloyd Company; electrical contract, Fred T. Ley & Company,

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Inc.; hardware contract, Carlisle Hardware Company. The former State Street Junior High School is now being demolished and work has been started on the construction of the new Junior High School. This building is expected to be ready for occupancy in September, 1923.

Old Buildings.

Among the alterations made during the year was the enlarging of the stage at the Central High School so as to increase its seating capacity. Other alterations were the enlarging of the Principal's office at the Acushnet Avenue School, and the construction of one large class room on the third floor of the Buckingham School, to be used for a combined mechanical drawing and wood-work shop. This room was equipped with heating and ventilating apparatus and electric lights. Owing to the increase of pupils at the Continuation School, a partition was erected on the third floor to make one regular class room. Tables for household science and furnishings for one room for metal work were provided. At the Chestnut Street School the proscenium arch was changed so that they would be able to make use of a curtain on the front of the stage. At the Worthington Street School partitions were removed on the third floor and one large class room was made, also a teachers' rest room was constructed in the corridor to be used also by the physician and nurse of that building.

Considerable electrical work was carried on during the year. At the Central High School a complete electric clock and program system was installed throughout the building. Electric motors were installed in the following buildings—Armory Street School, Forest Park School, Continuation School, Central Street School, and Vocational School. All motors were thoroughly overhauled and the belts and pulleys repaired. Electric lighting was installed in several buildings, some being increased in capacity, and new lighting installed in others, among these being Central Street School, old building, Continuation School, Buckingham School, Kensington School, Alden Street School, East Union Street School, three portables at Rushville, and the mechanical department of the Vocational School. Also during the year electric washing machines were wired and installed in the following buildings—Myrtle Street School, Buckingham School, Howard Street School, Chestnut Street School, Hooker School, and William Street School.

Two portable buildings were erected, one at Boston Road School and one at Rushville School. These buildings were formerly used at the White Street School and the Forest Park School.

A large amount of painting, tinting, and varnishing of both the exte-

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rior and interior of the school buildings was completed during the year. This work was carried on in nearly all of the school buildings of the city.

Plumbing repairs and alterations of toilets, sanitaries, wash bowls, baths, etc., were made in several of the school buildings. Changes in the sanitaries were made at the Armory Street School, two portable houses at Rushville, East Main Street School, Indian Orchard, and the Continuation School. Drinking fountains were installed in the Armory Street School, Continuation School, Technical High School, East Union Street School, Tapley School, and Acushnet Avenue School.

In addition to the above, a large amount of general repairs was carried on in all the school buildings. Several gas hot water heaters were installed, with gas piping, connections, and boilers, and all the necessary work to care for the school buildings under the control of this department. Changes in the lunch rooms to facilitate the handling of large numbers of pupils during the lunch hour were made at the Central High School, Technical High School, and High School of Commerce.

A complete improvement was made in the ventilating system of the Armory Street School, main building, also the heating and ventilating systems of the Continuation School were remodeled. Ventilation was installed for the girls' bath room at the Chestnut Street School. This work was done in addition to general repairs of the heating and ventilation in many of the other buildings.

Many cabinets, book closets, household science tables, and furnishings for the buildings and class rooms were provided during the year. Nearly all of these furnishings were built at our workshop, Emery and Boylston streets. The furniture taken from the State Street Junior High School was salvaged and used in various school buildings of the city.

The Pynchon Building, of brick construction, two stories and an attic, which was occupied for several years by the Vocational School, and which was standing on land needed for the extension of Broadway, was moved across Pynchon street, turned around, and placed on a new foundation erected by this department. The Turgeon Sons Company, Inc., of Holyoke, Mass., were the moving contractors. This work was carried on without damage to the building. An entirely new heating and ventilating system, also closets and sanitaries, were installed. Painting and varnishing was done in the class rooms, corridors, and basement, and a new concrete floor was laid throughout the basement. One half of the building is to be used for school purposes and will be ready for use at the opening of school in January, 1922.

The Committee on City Property purchased the house at No. 87 Hampden street, Indian Orchard, with a lot bounded by Berkshire, Myr-

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tle, and Hampden streets. It was found necessary to remodel the house and install a heating and ventilating system, sanitaries, and closets, also fire escapes and new exits to conform to the State Laws of Massachusetts governing school buildings. This house is now used for general auxiliary work in connection with the Myrtle Street School. The Committee also purchased the so-called Bengle property at No. 82 Hampden Street, Indian Orchard, to provide for future growth of this section of the city. The house and barn on this property were sold at public auction, the buildings to be removed from the premises.

The Committee also took over land on Whittum avenue, near the junction of Allen Street and Sumner avenue, for school purposes. Contract has been let for a two-room portable school building to be erected on this lot. The water supply line was laid to this location from Sumner avenue. There being no sewer in this locality, a large septic tank was constructed to provide for the care of at least two hundred fifty pupils, or a four-room school building. It is expected that this portable building will be occupied at the opening of school in January, 1922.

PUBLIC COMFORT STATION.

Corner Main and Greenwood Streets.

Feeling that there was need for a comfort station or sanitary in this section of the city, it was decided by the Committee and others interested that two rooms in the basement of the old Hooker School would make a suitable place to locate this sanitary. This comfort station will contain ten closets for women and five for men, with the usual fixtures necessary for a station of this kind. It is expected that this station will be ready for use December 27, 1921. Entrances to this station will be from Greenwood street and Main street. Attendants and matrons will be on duty from 6 a. m. to 11 p. m. each day.

DIVISION OF MUNICIPAL GROUP BUILDINGS.

Owing to the urgent need of more room in the Administration Building, it was decided to erect four offices and three small storerooms in the fourth floor east side corridor. One room is to be used by the Overseers of the Poor, and the balance of the rooms by the several supervisors of the School Department. These rooms will be completed in January and all free space in the Administration Building will then be in use. Extensive repairs to the coping and cornices were made this year and necessary repairs were made upon the Municipal Tower by the A. E. Stephens

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Company, this including terra cotta work, balustrades, platform, and spire. This, with the usual necessary repairs, completes the work on these buildings.

DIVISION OF MUNICIPAL HEATING PLANT.

All necessary repairs to boilers and pumps were made during the year.

DIVISION OF MILITIA RIFLE RANGE.

Owing to the demand for the use of this Range by the National Guard, and because of depredations by parties unknown, an underground telephone system was installed to replace one destroyed during the period when the Range was not in use. Necessary repairs were made upon the embankments in front and rear of targets, and many repairs were made upon the building, pits, and targets.

RENTED PROPERTY.

Tenement houses owned by the city and cared for by this department, situated on Spring street, Abbe avenue, Sumner avenue, and Wilbraham road, were rented and bills forwarded to the City Collector for collection.

SCHOOL SURVEY.

A survey and inventory has been made of the school buildings during this year. The survey included the square feet of floor surface in the buildings, area of sidewalks, lawns, playgrounds, glass, and also an inventory of furniture and furnishings, with the mode of heating and ventilation used.

I wish to extend my appreciation to the Committee on City Property and the employees of this department for their hearty co-operation and their consideration for the welfare of this department.

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DETAIL OF EXPENDITURES.

GENERAL ADMINISTRATION.

Superintendent's salary	$3,456.69	
Clerical assistance	5,789.89	
Office supplies	158.36	
Stamps and stamped envelopes	129.90	
Printing and binding	134.34	
Advertising	37.13	
Telephones and telegrams	81.57	
Traveling expenses and meals	40.50	
Repairs to typewriters	5.95	
New comptometer	350.00	
Total expenditures		$10,184.33
Appropriations	$10,290.00	
Expenditures	10,184.33	
Balance unexpended		$105.67

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SCHOOLS.—OPERATION.

School	Care of Buildings and Grounds	Fuel	Light and Power	Miscellaneous Operating Supplies and Expenses	Totals
Acushnet Avenue,	$2,204.77	$3,408.41	$240.97	$58.62	$5,912.77
Alden Street,	1,316.41	355.26	69.12	34.53	1,775.32
Armory Street,	3,752.99	3,808.61	358.37	135.68	8,055.65
Barrows,	2,094.19	2,137.06	185.66	55.91	4,472.82
Boston Road,	1,291.20	739.89	36.39	15.03	2,082.51
Brightwood,	3,278.11	1,365.36	592.59	75.32	5,311.38
Buckingham,	5,556.27	3,508.18	852.08	168.94	10,080.37
Carew Street,	2,589.58	1,890.37	50.91	86.80	4,617.66
Carlisle (unoccupied),	31.50				31.50
*Central Street,	3,330.03	4,391.01	324.92	142.20	8,188.16
Charles Street,	1,312.45	371.39	49.91	37.71	1,771.46
Chestnut Street,	9,862.64	8,781.93	1,947.04	260.64	20,852.25
Continuation,	3,254.85	2,119.39	590.79	113.33	6,078.36
Dry Bridge,	624.00	123.26		45.88	793.14
Eastern Avenue,	1,713.24	1,246.23	17.38	53.26	3,030.11
East Springfield,	962.00	184.21		13.70	1,159.91
East Union Street,	1,883.18	1,738.38	278.62	42.27	3,942.45
Emery Street Shop,	3,188.72	1,647.24	192.61	71.20	5,099.77
Five Mile Pond,	907.40	188.22		8.35	1,103.97
Forest Park,	10,879.23	9,270.91	1,584.05	428.19	22,162.38
Glenwood,	1,306.18	574.65	1.89	21.62	1,904.34
High—Central,	11,802.27	2,648.19	2,571.41	443.44	17,460.31
High—Commercial,	24,308.15	6,457.70	1,616.82	773.20	33,155.87
High—Technical,	13,972.93	7,740.02	1,333.88	799.32	23,846.15
Homer Street,	4,709.10	2,157.82	323.17	83.96	7,274.05
Hooker,	5,678.93	2,294.15	911.48	180.00	9,009.56
Howard Street,	4,733.73	1,677.81	1,395.68	164.53	7,971.75
†Indian Orchard Grammar,	4,976.60	6,454.92	619.35	128.03	12,178.90
Indian Orchard Primary,	1,636.15	1,364.13	23.87	37.47	3,061.62
Jefferson Avenue,	2,087.87	1,482.81	238.91	62.73	3,872.32
Kensington,	3,161.85	1,035.02	205.38	104.82	4,507.07
Liberty,	1,796.48	1,973.41	37.01	39.23	3,846.13
Lincoln,	2,738.23	1,279.74	202.40	162.60	4,382.97
Rushville,	1,011.32	345.93	3.92	5.67	1,366.84
School Street,	1,298.70	1,537.39	45.18	36.99	2,918.26
Sixteen Acres,	911.06	160.33		5.87	1,077.26
State Street (unoccupied),	87.00				87.00
Strickland,	1,617.89	1,128.83	42.48	50.26	2,839.46
Sumner Avenue,	2,260.62	854.00	223.05	136.04	3,473.71
Tapley,	2,439.77	1,899.82	195.55	77.04	4,612.18
‡Vocational (old),	984.54	661.73	738.74		2,385.01
Vocational (new),	2,443.36		807.03	127.15	3,377.54
Washington,	2,538.34	1,238.30	114.63	68.35	3,959.62
White Street,	2,135.90	1,332.46	205.91	72.26	3,746.53
William Street,	2,128.47	1,989.02	374.42	87.33	4,579.24
Worthington Street,	2,668.83	2,729.28	646.59	92.10	6,136.80
	$165,462.03	$98,282.72	$20,250.11	$5,557.57	$289,552.43
			Carried forward,		$289,552.43

* Includes 874 Central Street. † Includes Wight House. ‡ Includes 47 Vernon Street.

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Brought forward		$289,552.43
Automobiles:		
Salaries of chauffeur and helper	$3,080.88	
Supplies and replacements	948.31	
Repairs	171.64	
Registration	2.00	
		4,202.83
Pensions		621.40
Express and freight		434.25
Boiler insurance		50.20
Operating equipment		117.50
Care of rented property		81.62
Total expenditures		$295,060.23
Appropriations	$300,898.83	
Expenditures $295,060.23		
Orders outstanding 3,379.77		
	298,440.00	
Balance unexpended	$2,458.83	

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SCHOOLS.—MAINTENANCE.

School	Property Improvement and New Equipment	Electrical Work	Heating and Plumbing	Painting and Glazing	Roofs and Gutters	General Maintenance Expenses	Totals
Acushnet Avenue,	$309.57	$97.28	$373.82	$371.41	$90.30	$453.84	$2,196.22
Alden Street,	337.68	104.48	230.16	199.88		77.31	939.51
Armory Street,	1,951.44	325.27	638.71	924.78	93.85	1,291.80	5,225.85
Barrows,		92.69	316.04	353.33	143.88	225.66	1,131.10
Boston Road,			400.87	372.00	18.62	379.58	1,171.07
Brightwood,	84.00	217.96	646.78	533.82	76.77	547.16	2,105.99
Buckingham,	1,231.86	636.96	965.50	381.28	63.17	821.56	4,100.33
Carew Street,	174.23	70.19	167.46	707.59		660.70	1,780.17
Central Street,	1,031.05	181.43	243.36	976.47	253.66	628.94	3,314.91
374 Central Street,		4.45	77.55	1.65		152.28	235.93
Charles Street,	154.41	27.43	24.21	209.28		109.22	524.55
Chestnut Street,	914.01	506.78	933.85	772.46		1,829.67	4,956.72
Continuation,	834.10	762.58	4,782.13	687.52	66.35	2,405.95	9,538.63
Dry Bridge,	32.16		14.15			25.99	72.30
Eastern Avenue,		43.46	155.36	335.19		90.98	624.99
East Springfield,	32.16		50.59	26.14	19.98	82.32	211.19
East Union Street,		70.41	125.92	117.56	59.12	392.99	766.00
Five Mile Pond,			52.71	11.18		81.31	145.20
Forest Park,		857.47	407.71	569.51	37.06	1,592.44	3,464.19
Glenwood,		19.05	10.94	7.95	68.16	178.70	284.80
High—Central,	2,737.17	673.11	540.27	470.68	556.43	1,381.64	6,359.30
High—Commercial,	183.60	643.30	373.12	411.71		1,006.32	2,618.05
High—Technical,	679.05	756.53	779.17	612.48	35.78	1,626.22	4,489.23
Homer Street,	139.56	224.76	331.74	161.52	64.81	936.30	1,858.69
Hooker,	416.00	168.68	989.45	227.61		453.08	2,254.82
Howard Street,	123.75	350.54	454.04	787.30	24.95	819.10	2,559.68
I. O. Grammar,	132.77	509.29	906.22	202.63	58.68	827.24	2,636.83
I. O. Primary,	22.95	24.59	410.76	66.53		340.87	865.70
Jefferson Avenue,		60.57	80.92	38.60	58.99	269.73	508.81
Kensington,		731.59	68.99	216.93	49.44	429.34	1,496.29
Liberty,	93.81	58.16	14.07	33.52	4.74	451.01	655.31
Lincoln,	8.10	153.60	511.22	126.22		706.84	1,505.98
Rushville,	80.82	193.78	138.75	80.86		169.07	663.28
School Street,	14.40	5.97	336.16	311.62	65.70	231.91	965.76
Sixteen Acres,			39.62	1.00		126.44	167.06
State Street (unoccupied)						1.25	1.25
Strickland,	50.78	77.46	75.37	196.99	99.58	179.69	679.87
Sumner Avenue,	140.96	189.76	14.69	111.29	30.82	479.27	966.79
Tapley,	40.00	83.36	132.11	230.54	298.62	582.37	1,367.00
Vocational (old),		149.84	23.36	13.01		420.89	607.10
Vocational (new),	3.35	75.16	129.05	124.65		193.88	526.09
Washington,	116.32	169.13	159.09	216.18		448.28	1,109.00
White Street,		51.82	53.09	103.17	17.00	126.63	351.71
William Street,		241.28	226.32	489.00	84.04	506.35	1,546.99
Worthington Street,	946.60	155.16	688.61	749.59	270.76	635.00	3,445.72
	$18,516.66	$9,765.28	$18,084.01	$13,542.13	$2,710.76	$25,377.12	$82,995.96
						Carried forward,	$82,995.96

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Brought forward		$82,995.96
Emery Street Shop and Storehouse:		
Labor and materials on building	$608.61	
Labor and materials on equipment	516.55	
New equipment	650.07	
		1,775.23
Boston Road School: moving and setting up portable house		898.26
Rushville School: moving and setting up portable house, enlarging septic tank		1,536.05
State Street School: salvaging equipment		478.09
Washington School: curbing		871.99
Wight House: alterations and equipment		7,852.19
Carfares		474.18
Vacations and other undistributed time		2,586.84
Miscellaneous tools		674.36
Care of rented property		91.14
Total expenditures		$100,234.29
Appropriations	$106,753.72	
Expenditures $100,234.29		
Orders outstanding 3,847.68		
	104,081.97	
Balance unexpended	$2,671.75	

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MUNICIPAL GROUP BUILDINGS.

Custodian's salary		$2,251.67
Administration Building:		
Care of building and grounds	$20,267.56	
Telephone service	4,540.05	
Express and freight	90.81	
Light and power	2,411.75	
Cleaning and toilet supplies	1,297.00	
Elevator supplies	97.52	
Laundry	369.43	
Window cleaning	606.96	
Snow shoveling	624.30	
Ice	556.00	
Planting shrubbery	140.00	
Miscellaneous supplies and expenses	239.25	
Repairs to building	2,400.77	
Repairs to equipment	1,524.87	
New equipment	2,838.64	
		38,004.91
Auditorium:		
Care of building and grounds	$8,209.39	
Light and power	2,288.75	
Cleaning and toilet supplies	566.46	
Elevator supplies	35.00	
Care of organ	468.11	
Moving seats	453.10	
Repairs to building	1,090.50	
Repairs to equipment	1,011.13	
New equipment	72.80	
		14,195.24
Campanile:		
Care of building and grounds	$650.00	
Chime ringer	398.84	
Care of clock	363.50	
Light and power	810.08	
Repairs to building	3,862.57	
Repairs to equipment	437.73	
		6,522.72
Sanitary:		
Care of building and grounds	$6,156.33	
Cleaning and toilet supplies	1,214.79	
Laundry	662.84	
Repairs to building	300.11	
Repairs to equipment	330.01	
		8,664.08
Total expenditures		$69,638.62

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Appropriations		$70,519.76
Expenditures	$69,638.62	
Orders outstanding	756.75	
		70,395.37
Balance unexpended		$124.39

MUNICIPAL HEATING PLANT.

Salaries, engineers and firemen		$11,315.98
Electricity for lighting		176.16
Fuel		7,308.08
Laundry		60.00
Operating supplies and expenses		989.09
Repairs to building		210.30
Repairs to equipment		220.72
New equipment		442.26
Total expenditures		$20,722.59
Appropriations	$24,484.00	
Expenditures	$20,722.59	
Orders outstanding	1,569.71	
	22,292.30	
Balance unexpended	$2,191.70	

MILITIA RIFLE RANGE.

Caretaker		$312.00
Taxes and water rent		192.55
Insurance		30.00
New telephone system		1,365.95
Repairs to Range house and targets		577.07
Total expenditures		$2,477.57
Appropriations	$2,721.00	
Expenditures	2,477.57	
Balance unexpended	$243.43	

Respectfully submitted,

HIRAM L. DORMAN,
Superintendent of Public Buildings.

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FIRE COMMISSIONERS

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BOARD OF FIRE COMMISSIONERS.

	Term Expires.
WILLIAM W. TAPLEY, *Chairman*,	1st Monday in May, 1923
CHARLES B. HITCHCOCK, *Secretary*,	1st Monday in May, 1924
EDWARDS O. DAVIS,	1st Monday in May, 1925
THOMAS J. SHERIDAN,	1st Monday in May, 1922
*JOHN D. SHUART, *Alderman*,	Jan. 1, 1923

Chairman of Fire Department Committee of the City Council, ex officio.

BOARD OF FIRE CHIEFS.

Chief of the Department,	WILLIAM H. DAGGETT
Deputy Chief,	EVERETT A. KIMBALL
District Chief,	BURTON STEERE
District Chief,	JOHN R. GRAVES
District Chief,	CLARENCE E. GESNER
District Chief,	ARTHUR H. STRONG
District Chief,	HERBERT C. ROOT
District Chief,	CHARLES S. TAYLOR

Supt., Division of Fire Alarm Telegraph,	HERBERT H. BERRY
Supt., Division of Repairs,	CHARLES J. CLARK

**Appointed Chairman of Fire Department Committee of the City Council, Jan. 2, 1922, succeeding Charles A. Allbe, ex-Alderman.*

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REPORT

OF THE

BOARD OF COMMISSIONERS OF THE FIRE DEPARTMENT

SPRINGFIELD, MASS., December 17, 1921.

To His Honor, the Mayor, and Members of the City Council.

GENTLEMEN:—It is a source of much satisfaction to the members of this Commission that we find ourselves able, at the close of the first fiscal year during which the Fire Department has been operated at its full quota under the Two Platoon system, to inform you that the indications of the experimental stage have been verified and that our expectations for operation of the complete and reorganized Department under this system of fire protection have in all respects been fulfilled.

We have been impressed by the spirit of co-operation which has pervaded the personnel and which has worked in large degree to facilitate establishment of the Department on the present basis. Apparently the men have keenly realized the advantages accruing to them under the Two Platoon system and have, except in one or two cases, such as usually prove the rule, been careful not to abuse their privileges.

Appointments to the service have, in accordance with the requirements of the Civil Service Law and Regulations, been from the ranks of veterans of the World War and we have been careful whenever certification by the Commissioner of Civil Service has made this possible, to appoint only residents of Springfield. As a result a very large per cent of the members of the Department are World War veterans.

We take pride in this fact for it is a personal pleasure to the members of this Commission to feel that it lies within our power to thus recompense in some degree men who did their full duty during one of the most critical periods in the history of the world.

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Members of the Department are classified as follows:—

Chief of the Department	1
Deputy Chief	1
District Chiefs	6
Superintendent, Division of Fire Alarm Telegraph	1
Assistant Superintendent, Division of Fire Alarm Telegraph	1
Superintendent, Division of Repairs	1
Captains	21
Lieutenants	23
Engineers of motor pumping engines	4
Hose and laddermen	248
Fire alarm operators and linemen	6
Mechanics	3
Bookkeeper	1
Clerk	1
Total	318

Although changes on this side of the Connecticut River in connection with building of the new bridge have not yet reached that point where their effect on the efficient service of companies quartered at the Headquarters Station, Court and Water Streets, may actually be demonstrated, we are satisfied that, in the interests of the most effective fire protection it would be advisable to abandon use of the present Headquarters building for Fire Department purposes as soon as it is found practicable to erect another building for the same purposes on another and more advantageously located site.

Notwithstanding the fact that it will be several months before we are required to find other quarters for the apparatus and companies quartered at the present Chestnut Street Station, which is to be removed in connection with the extension of Taylor Street, we fully realize the need for action and, in the interests of economy, are hopeful of finding a site admitting of construction thereon of a double or combination fire station facing on parallel streets, in one portion of which may be housed the apparatus and companies, together with the Headquarters office, now quartered in the present Headquarters Station and in the other portion of which shall be quartered the apparatus and companies now at the present Chestnut Street Station.

This matter has been made the subject of very complete investigation by a sub-committee composed of members of this Commission and of the Board of Fire Chiefs. Figures on properties believed to be well adapted to the purpose have been secured but it has been found impracticable to take further definite action pending positive information from the City

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Planning Board concerning changes to be recommended by that Board and the effect of such changes, if any, upon those properties we have in mind.

The necessary information will, we have been assured, soon be available and its receipt will be followed by the specific recommendation of this Commission which in general, is to the effect that purchase of a site suitable for such a double fire station as we have suggested be made as soon as possible; that as soon as practicable thereafter a station of the type proposed be erected thereon and that the Headquarters office, the fire-fighting apparatus and companies at both the present Headquarters Station and Chestnut Street Station be transferred to the new building.

We do not recommend transfer of the plant of the Division of Fire Alarm Telegraph, now located on the top floor of the Headquarters Station at the corner of Court and Water Streets, for the reason that in our opinion it would be unwise to attempt removal of this plant. Because of its relation to cables installed and because of the great expense certain to be involved in relocation of these cables and in removal and reinstallation of the complex units of the plant itself it would seem best that the Division of Fire Alarm Telegraph continue to be maintained in its present location and we believe this would be wholly feasible in connection with whatever use other portions of the present Headquarters Station might be put to by the City.

Important as we believe the suggested relocation of the Headquarters and Chestnut Street Stations to be as related to the future work of the Department, we do not wish to create the impression that in thus making provision for better fire protection in the central portion of the city we are overlooking the needs of outlying sections.

We are now, as last year, keenly cognizant of the need of better fire protection for East Springfield as well as for that portion of the city of which the "X" seems a center. Therefore we respectfully renew our recommendation of last year that lands be selected and acquired by the City on which two fire stations may as soon as practicable be erected, one in East Springfield and the other in the vicinity of the junction of White Street and Sumner Avenue.

In addition we make the same recommendation with reference to acquisition of land and the erection of a fire station thereon in the vicinity of the junction of Berkshire Street and Bay Street.

We have not lost sight of that other pressing building need, a Department repair shop. With the passing of another year the importance of the Division of Repairs and the necessity of providing every convenience for expediting its work has been emphasized in no unmistakable manner.

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Just as we would deem it the height of folly to handicap the efficiency of the Department as a whole through failure to provide satisfactory hose, the necessary fire-fighting tools or any other essentials of the service, so we now deem it not only unwise but positively dangerous to longer maintain a handicap upon the work of the Department through failure to provide quarters wherein repairs on apparatus may be made with least loss of time.

Therefore we heartily endorse that contained in the accompanying report by the Chief of the Department with reference to better quarters for the work of the Division of Repairs and respectfully recommend that provision be made for such quarters, either by erection of a new, fireproof building or through remodeling of one of the present fire stations in such manner as to provide a commodious repair shop in connection.

Also there still remains the need of changes in the upper portion of the Mill Street Station for the better accommodation of firemen quartered there. Conditions were such that this work could not be carried forward as expected during the fiscal year 1921 and we recommend that it be undertaken during 1922. In addition we have to again recommend the installation of a concrete apparatus floor at the Oakland Street Station.

The foregoing constitute the major building needs of the Department and we are pleased to inform you that we have nothing to recommend as regards apparatus. The Department now has forty-three pieces, as follows:—

Hose wagons (combination hose and chemical.)	14
Ladder trucks (6 aerial, 2 city service. Of these 3 are electric-driven; 3, gasoline-driven; 1, electric tractor-drawn; 1, gasoline tractor-drawn.)	8
Pumping engines (gasoline triple combination.)	5
Water tower (gasoline tractor-drawn.)	1
Auxiliary squad cars	3
Chiefs' cars (Chief of Department, 1; Deputy Chief, 1; District Chiefs, 6.)	8
Fire Alarm service (1 truck; 1 runabout.)	2
Superintendent of Repairs (runabout)	1
Runabout	1
Total	43

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The work done in the Department Drill School this year under the direction of a committee of Supervisors of Training has been very successful and we take pleasure in adding to the thanks of the Chief of the Department, the Board of Fire Chiefs and those of the Supervisors of Training, already expressed, the sincere appreciation of this Commission for the excellent work by those officers who served as instructors. We feel that the school, conducted along the lines indicated by the Supervisors, is certain to prove a powerful factor for efficiency, establishing a standard to which all members of the fire-fighting force remaining in the service must eventually attain.

The recent fire in the store of the Kennedy Co., Main Street, serves, in our opinion, to emphasize the need of a Department physician and the recommendation of last year that such an official be connected with the Department is respectfully renewed.

We believe the time has arrived when Springfield should face the problem now being faced by communities of corresponding size; that of systematic fire prevention. At the present time all that is done along this line is accomplished through inspections by members of the Department which are followed up, in flagrant cases of offence against the law, by notices to offenders from the Chief of the Department.

In larger cities this work is carried forward on a much more comprehensive scale by a duly organized Bureau of Fire Prevention. We do not wish to be understood as urging upon Springfield at this time the additional expense which creation and maintenance of such a bureau would involve but we believe that within comparatively few years such a division of the Fire Department will have become an absolute necessity. We are convinced it would be wise, in some measure, to prepare for this and therefore propose during the ensuing year to give Fire Prevention, as conducted in other cities, exhaustive investigation, with a view to making the latest methods employed the subject of special recommendation to the City Council.

Respectfully submitted,

WILLIAM W. TAPLEY, *Chairman,*
CHARLES B. HITCHCOCK, *Secretary,*
EDWARDS O. DAVIS,
THOMAS J. SHERIDAN,
C. A. ALLBE,
Board of Fire Commissioners.

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REPORT

OF THE

CHIEF OF THE DEPARTMENT

SPRINGFIELD, MASS., December 16, 1921.

To the Honorable Board of Commissioners of the Fire Department.

GENTLEMEN:—The fiscal year 1921 has, from the standpoint of operation of the Fire Department, been one of the most satisfactory within the experience of the writer. The several branches have functioned under the Two Platoon system in a manner highly gratifying and clearly indicating attainment of the highest degree of efficiency in years to come.

I feel that one of the most important developments toward this end was reorganization and operation of the Department drill school along broad and comprehensive lines. Conduct of this school, of which we may confidently expect much for the up-building of the Department in the future, was early in the year entrusted by the Board of Fire Chiefs to a board of its own members designated as Supervisors of Training and including District Chiefs Arthur H. Strong, Clarence E. Gesner, Herbert C. Root, and Charles S. Taylor.

By the Supervisors a curriculum was formulated and instructors in each branch were chosen from among officers within the service, each known to be proficient in the branch of training assigned him. So that the work of the school might co-ordinate with operation of the Department under the Two Platoon system two instructors were appointed in each of the three principal branches, as follows:—hose work, Capt. Lewis Brown, Engine Co. No. 3, and Lieut. George E. Chapman, Engine Co. No. 8; ladder work, Capt. Horace C. Feltham, Truck Co. No. 8, and Capt. James Coffey, Truck Co. No. 10; scaling ladder work, Capt. Patrick J. McGrath, Engine Co. No. 8, and Capt. Fred C. Wright, Hose Co. No. 7; assistants, Capt. Noah E. Pooler, Jr., and Lieut. Frank J. Sullivan, both of Hose Co. No. 2.

William N. James, engineer of Engine Co. No. 3, gave instruction in the operation of pumps, to classes in each platoon.

In addition to training given at the Drill School, engine, hose, ladder

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and squad companies were given combination drills at the Mill Street Station and daily house drills were held in all stations.

The excellent work done by the instructors has been made the subject of special comment in a report submitted by the Supervisors of Training. I share in the appreciation expressed by Supervisors and have given my endorsement to their recommendation that, as an expression of this appreciation, these instructors each be allowed one week's absence from duty, with pay, this allowance to be in addition to the annual vacation period.

Certain expenditures will be necessary during 1922 to complete the equipment of the Drill School but these will not be large. Also, we shall need five thirty-five or forty-five foot extension ladders in addition to fire tools and other small pieces of apparatus equipment.

Some painting must be done at three of the stations. This will include exterior work at the Oakland Street Station and exterior and interior work at both the Pine Street and Winchester Square Stations.

The need of the repair shop recommended last year is daily increasing and I urge upon you that definite action toward the erection of a fireproof building for this purpose be undertaken at once.

Permit me to point out to you that the City has been fortunate in that none of the more important pieces of fire apparatus has been disabled in such manner as to involve major repairs for the space available and accommodations for quickly attending to repairs on disabled apparatus at our present cramped repair shop in the North Street Fire Station are wholly inadequate to the now rapidly growing needs of the Department.

The apparatus is now, I am pleased to state, in good condition. Aside from the purchase of a Chief's car the principal outlay chargeable to apparatus during 1921 was for replacement of the battery in Truck No. 8. Unless something unforeseen develops it is probable that expenditures on apparatus during 1922 will be well within the average of recent years.

For the purpose of enabling all members of the Department to become thoroughly acquainted with the provisions of the new Rules and Regulations approved by your honorable body on May 18th, 1921, several weeks were allowed to elapse after the printed books were distributed in quarters before the rules were placed in effect on November 2nd, last. Thus unfamiliarity with the rules could not be offered as an excuse by offenders and comparatively few infractions have resulted.

This leads to a point which I trust may be given due consideration. Under present conditions all authority in matters of discipline within the Department is vested in your honorable body. Among cases I am each year called upon to refer to you are some of comparatively minor importance, yet likely if not given prompt attention, to have a detrimental

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effect upon the morale of the Department. I refer now to cases of that degree of seriousness which places them just outside the limit of authority vested in the head of the Department in such matters, yet not of sufficient importance to warrant special action by the Board of Fire Commissioners. Before such cases can, in the course of your regular meetings, be brought to the attention of your honorable body, practically a whole month sometimes elapses with the result that the moral effect of such discipline as is then authorized is impaired if not wholly lost.

As a remedy for this condition I respectfully recommend that authority be given the Chief of the Department, as your representative, to take evidence in and pass judgment upon such cases as those referred to in the preceding paragraph, a report covering each case to be prepared by the Chief and submitted to your honorable body for confirmation, his finding in each instance to be subject to appeal to the Board of Fire Commissioners.

I have previously brought to your attention the probable result upon the morale of the Department if the Veterans' Preference Act continues long upon the statute books in its present form and need not go over the situation in detail here. I desire however to urgently recommend that you institute action through the proper channels looking to the enactment of changes in this law.

Due principally to the fire in the plant of Hinsdale Smith & Co. last January, in which a loss of over a half million dollars was sustained, our report for 1921 shows the largest fire loss of recent years the total, from returns now available, being $984,027.96. Of this amount $965,228.68 represents the insured and $18,799.28 the uninsured loss. Among other fires which contributed to swell the 1921 loss were that in the lumber yards of C. P. Chase & Co., Inc., last May and those in the store of the F. W. Woolworth Co. and in the former Hotel Russell building last month.

The number of alarms answered during 1921 was 1074, the largest since 1918, when the Department responded to 1244. Those of 1921 are classified as follows: bell, 285; telephone, 628; still, 138; thermostat, 8 and A. D. T., 15. Fire inspections made by representatives of the Department during the year totaled 30,855. This is the largest number made in recent years and may be taken to indicate that the Department is doing all that present conditions will permit along the lines of fire prevention.

Financial outlay during 1921 has been principally upon maintenance and when I state that of a total appropriation of $679,072, the sum of $675,533.53 was expended I know you will take into consideration the fact that we are now dealing with a Department of 318 men, under the

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Two Platoon system, as against that of 189 men under the continuous service system, of a few years ago. Also, I know that you realize the Department, of necessity, must be on the alert to keep pace with the development of the city and that in the degree in which it succeeds in this endeavor, affording complete fire protection to the greater Springfield, in just that proportion may expense involved properly be checked up with results obtained.

Respectfully submitted,

W. H. DAGGETT,
Chief.

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REPORT

OF THE

SUPERINTENDENT OF THE DIVISION OF FIRE ALARM TELEGRAPH

SPRINGFIELD, MASS., December 16, 1921.

To the Honorable Board of Fire Commissioners of the Fire Department.

GENTLEMEN:—Some four miles of overhead wire of the fire alarm and police signal system have been removed from poles in Fisk Avenue, Orange Street, Allen Street, Carew and Armory Streets and placed underground during the past year.

New box locations have been established as follows: No. 635, at the corner of Sumner Avenue and Fort Pleasant Avenue; No. 763, at the corner of Massasoit Street and Massasoit Place.

On account of changes in Water Street, due to the new bridge approach, box number 28, formerly at the corner of Water and Vernon Streets, has been changed to Vernon and Broadway.

The fire alarm system in Water Street in the new bridge section during the past few months has been operated aerial but duct having now been laid, a cable will soon be drawn in and the overhead can be removed.

In Walnut Street, from State to the Walnut Street Engine House, a new lead cable has been installed. In this section loose wires in a pipe, the only loose wires in our underground system in the city, existed and have given considerable trouble during the past two years. This trouble will now be eliminated.

Work has begun on the installation of the "covering in" system suggested last year. Considerable shifting of cable will be required as there are no spare conductors in several streets leading to some of the engine houses.

As this city is fast growing and spreading out it will soon be necessary for this Department to extend its fire alarm circuits beyond the two mile limit. It will be very detrimental to the fire alarm system to operate underground and overhead to any extent together owing to liability of

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influence from adjacent heavy voltage circuits of the lighting company or from lightning.

It is earnestly requested and recommended that the present two mile underground limit be extended as, if this is done, many dollars will be saved the City in underground work as by terms of its franchise the Telephone company now furnishes the City a duct through every street it goes and the City occupies telephone ducts with all its circuits.

A new battery of fifty-six cells has recently been installed on the Indian Orchard system. No new boxes have been added during the year past but one or two should be provided the coming year. The system is in first-class condition. Considerable new overhead wire was run in during the past Summer. This system is mostly overhead.

Respectfully submitted,

HERBERT H. BERRY,
Superintendent.

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COMPARATIVE STATEMENT OF LOSS.

*Year	Alarms	Property Loss	Per Capita Loss
1871	21	$199,317.00	$7.46
1872	22	106,425.00	3.99
1873	48	191,107.00	7.16
1874	38	285,822.02	10.70
1875	57	476,961.45	15.36
1876	53	120,824.00	3.89
1877	32	74,071.00	2.39
1878	39	49,552.00	1.60
1879	33	36,706.70	1.18
1880	27	8,661.35	.26
1881	61	92,352.82	2.77
1882	73	60,232.06	1.81
1883	46	34,969.11	1.05
1884	54	30,755.34	.92
1885	48	39,241.91	1.04
1886	61	33,584.00	.81
1887	86	64,930.29	1.73
1888	79	177,577.19	4.73
1889	79	52,085.19	1.39
1890	92	33,864.99	.77
1891	141	201,126.00	4.55
1892	140	125,243.36	2.83
1893	147	397,531.03	9.00
1894	125	57,732.41	1.31
1895	128	43,311.74	.84
1896	141	57,206.60	1.11
1897	157	55,460.89	1.08
1898	171	235,981.79	4.58
1899	213	94,694.02	1.84
1900	222	62,157.70	1.00
1901	236	96,409.25	1.55
1902	248	149,931.33	2.42
1903	311	30,316.69	.49
1904	385	68,332.86	1.10
1905	424	208,451.58	2.83
1906	403	105,771.28	1.39
1907	498	535,549.74	7.05
1908	530	88,690.38	1.17
1909	675	75,701.81	1.00
1910	710	133,329.47	1.50
1911	729	397,714.08	4.47
1912	829	166,210.66	1.87
1913	1,033	264,165.72	2.97
1914	993	328,664.94	3.70
1915	938	207,506.20	2.02
1916	911	177,946.39	1.73
1917	1,044	181,796.03	1.51
1918	1,244	330,147.70	2.64
1919	908	261,361.29	2.01
1920	1,002	360,115.35	2.77
1921	1,074	1,071,672.84	7.65

*Fiscal year; December 1 to November 30 inclusive.

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STATEMENT OF
ALARMS, VALUATION, INSURANCE AND LOSS
Involved in Fires of the Fiscal Year Ended Nov. 30, 1921.

	Alarms						Value	Insurance	Loss				
	Bell	Telephone	Still	Thermostat	A.D.T.	Total			Insured	Uninsured	Total	In Building Where Fire Originated	By Exposure
Dec.	24	45	8	1	1	79	$891,610.00	$633,660.00	$49,511.12	$2,695.00	$52,206.12	$52,206.12	
Jan.	23	39	11		1	74	1,393,400.00	1,202,065.00	630,667.30	5,202.21	635,869.51	635,869.51	
Feb.	8	29	2	2	1	42	91,000.00	71,325.00	4,556.94	200.00	4,756.94	4,756.94	
March	26	82	10	2	1	121	317,800.00	252,100.00	20,337.00	466.75	20,803.75	20,755.40	$48.35
April	22	81	10		1	114	300,135.00	266,450.00	12,844.51	1,743.20	14,587.71	14,295.71	292.00
May	20	50	7		5	82	227,210.00	187,288.00	92,638.27	465.00	93,103.27	88,490.04	4,613.23
June	22	83	17	1		123	276,234.50	224,900.00	15,341.17	2,376.50	17,717.67	17,588.67	129.00
July	31	30	12		1	74	713,845.00	618,800.00	20,781.08	3,275.00	24,056.08	24,056.08	
Aug.	20	30	7	1	2	60	261,872.50	201,962.21	35,337.35	1,407.00	36,744.35	36,744.35	
Sept.	16	30	15			61	655,425.00	540,700.00	20,028.10	507.62	20,535.72	20,535.72	
Oct.	31	87	27		2	147	700,646.66	652,305.71	18,155.51	9,945.41	28,100.92	27,954.92	146.00
Nov.	42	42	12	1		97	1,495,798.46	1,335,945.00	121,280.25	1,910.55	123,190.80	123,190.80	
1921	285	628	138	8	15	1074	$7,322,977.12	$6,187,500.92	$1,041,478.60	$30,194.24	$1,071,672.84	$1,066,444.26	$5,228.58
1920	255	598	134	2	13	1002	$12,689,111.98	$10,786,383.21	$309,059.49	$51,055.86	$360,115.35	$357,421.91	$2,693.44
1919	232	540	118	7	11	908	11,388,301.46	9,853,231.16	207,304.26	54,057.03	261,361.29	260,550.29	811.00
1918	346	711	168	6	13	1244	12,706,227.83	10,427,759.37	314,058.85	16,088.85	330,147.70	328,122.32	2,025.38
1917	287	603	127	12	15	1044	4,878,751.74	4,019,121.09	168,040.57	13,755.46	181,796.03	180,170.10	1,625.93
1916	308	465	116	9	13	911	10,204,850.60	8,821,015.14	170,646.47	7,299.92	177,946.39	175,272.33	2,674.06
1915	339	467	113	5	14	938	5,593,339.60	4,704,693.27	198,148.00	9,358.20	207,506.20	206,753.62	752.58
1914	338	485	153	11	6	993	6,304,701.85	5,598,198.09	308,561.01	20,103.93	328,664.94	320,552.82	8,112.12

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CLASSIFICATION OF LOSS

INVOLVED IN FIRES OF THE FISCAL YEAR ENDED NOV. 30, 1921.

	*$10 or Less.	Between $10 and $50.	Between $50 and $100.	Between $100 and $1,000.	Between $1,000 and $5,000.	Between $5,000 and $10,000.	Between $10,000 and $20,000.	Over $20,000.	Total Alarms.
Dec.	47	5	8	11	7	..	..	1	79
Jan.	49	3	3	12	5	1	..	1	74
Feb.	30	3	..	7	2	..	..	..	42
March	102	3	2	9	4	1	..	..	121
April	93	8	3	6	3	1	..	..	114
May	70	2	3	1	5	..	..	1	82
June	101	9	4	4	4	1	..	..	123
July	51	5	4	8	5	..	1	..	74
Aug.	34	7	2	11	4	1	1	..	60
Sept.	42	8	4	2	4	1	..	..	61
Oct.	123	5	4	13	1	..	..	1	147
Nov.	68	7	1	12	6	1	..	2	97
Total	810	65	38	96	50	7	2	6	1,074
1920	756	48	33	105	52	2	1	5	1,002
1919	681	54	44	94	27	3	2	3	908
1918	929	64	66	141	37	2	2	3	1,244
1917	793	67	43	100	34	5	1	1	1,044
1916	667	48	42	110	40	2	2	..	911

*Includes false and needless alarms answered.

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ALARMS ANSWERED

Hose Co. No. 1	120
Hose Co. No. 2	162
Hose Co. No. 6	61
Hose Co. No. 7	161
Hose Co. No. 10	117
Hose Co. No. 11	43
Hose Co. No. 12	55
Hose Co. No. 13	99
Truck Co. No. 1	83
Truck Co. No. 3	67
Truck Co. No. 6	37
Truck Co. No. 8	99
Truck Co. No. 10	115
Truck Co. No. 13	84
Engine Co. No. 3	99
Engine Co. No. 4	107
Engine Co. No. 5	104
Engine Co. No. 8	122
Engine Co. No. 9	134
Squad A	268
Squad B	357

CAUSES OF FIRES AND ALARMS

Ammonia leak	1
Automobile wreck	2
Backdraft	3
Backfire	23
Bonfires	24
Broken gas mantle	1
Broken sprinkler	1
Brush, forest, grass, leaves	291
Building wrecked	2
Burning coke	1
Burning meat	1
Burning paint	1
Burning waste	1
Carelessness	2
Careless smoking	34
Careless with candle	8
Careless with fireworks	2
Careless with gasoline	6

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Careless with matches	22
Careless workman	6
Children and matches	23
Chimney fires	41
Clothing near stovepipe	1
Defective chimney (flue)	5
Defective fireplace	5
Defective stovepipe (smokepipe)	4
Defective wiring	1
Dumping grounds	68
Electric auto heater	1
Electric flatiron	5
Excelsior in boiler room	1
Explosions (oil heaters)	2
False alarms	83
Faulty installation of range (furnace) (heater)	3
Fireworks	1
Friction	2
Gas flame	2
Gas heater (stove) (plate)	3
Gas leak (illuminating)	2
Gasoline engine	1
Gasoline leak	10
Gasoline torch	1
Hot ashes (coals) (cinders)	10
Hot-box	1
Hot fat (grease)	3
Hot oil	1
Hot polish	1
Hot tar	3
Incendiary	2
Kettle of candy	1
Lightning	3
Malicious mischief	9
Needless alarms	68
Oil heater (stove)	3
Oil lamp (lantern) (torch)	2
Open grate	1
Overheated engine	2
Overheated dry-room	5
Overheated furnace (heater) (boiler)	7
Overheated incubator	1
Overheated motor	2
Overheated pipe covering	2
Overheated smokehouse	1
Overheated stove (range)	3
Overheated stovepipe (smokepipe)	9
Overheated transformer	1
Paper near stove	1
Peanut roaster	1
Rekindling of former fire	10
Rubbish in barrels	3
Rubbish in basement	7
Rubbish, miscellaneous	31
Sawdust	5
Second alarm	3

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Short circuit	14
Smoking hams	1
Sparks from bonfire	1
Sparks from chimney	7
Sparks from fireplace	1
Sparks from former fire	1
Sparks from grass fire	3
Sparks from locomotive	3
Sparks in flue	1
Sparks in shingle pile	1
Spontaneous combustion	8
Supposed incendiary	1
Thawing pump bearings	1
Thawing waterpipes	1
Trolly cars	18
Unknown	108
Wood near heating plant (stove)	4
Vulcanizing machine	1
Total	1,074

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POLICE DEPARTMENT

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REPORT

OF THE

POLICE COMMITTEE

To His Honor, the Mayor, and the City Council of the City of Springfield.

GENTLEMEN:—We beg to submit herewith our annual report covering the activities of this department for the year ending November 30, 1921, together with our recommendations for the future.

On March 28, 1921, you saw fit to abolish the Police Commission and to place this department in control of the police committee of the City Council. The ordinance provided that the membership should be made up of the president of the Board of Aldermen, the president of the Common Council, one other alderman appointed by the Mayor and two other councilmen appointed by the president of the Common Council.

INCIDENTS OF THE YEAR.

The appropriation for the fiscal year 1921 was $451,762.58. During the year an ordinance was passed by the City Council establishing the number of night and day watchmen at two hundred and five, an increase of twenty-five men. This has added somewhat to the cost of operation for the department for the past few months and will necessitate a somewhat larger appropriation for the next fiscal year.

The number of arrests for all purposes shows an increase over last year and the year 1919, but compares favorably with the average for the past five years. There is still an appreciable increase for the number of arrests for violation of the motor vehicle laws and for violation of the city ordinances.

We believe it pertinent to direct your attention to the large percentage of accidents reported by police officers due to automobiles as compared with the total. This is a condition which is not new this year but one with which we have had to contend for several years past. We believe that stricter traffic rules should be made to decrease, if possible, this large number of accidents.

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EQUIPMENT.

The department has two automobile vans which are in need of new tops. We also have five Ford cars, two of which are about two years old, and three which were purchased last spring. We also have one Apperson touring car, purchased a few months ago, which is still in excellent condition. We have three motocycles which were purchased in August. These motocycles have been run about ten thousand miles and it is the recommendation of your committee that these be turned in and six new motocycles purchased. We would also recommend that the five Ford touring cars be turned in and five new Ford touring cars be purchased, two for patrol duty from midnight until eight in the morning and three from eight in the morning until midnight, two shifts.

APPOINTMENTS, DEATHS, RESIGNATIONS, RETIREMENTS, DISMISSALS.

There have been twenty-one new appointments to the force during the year.

Sergeant Frederick L. Thayer and Patrolman Charles H. O'Connell died during the year.

During the year nine members of the department have resigned and two of these were later reinstated.

Edward P. Tilton was placed upon the retired list during the year.

One man was dismissed after a hearing being given on charges preferred.

RECOMMENDATIONS.

We would recommend that the police building be increased in size to provide for enlarged quarters for the police court. We believe that this can be accomplished by raising the garage roof, thereby providing quite an additional space. It is our understanding that the County is paying rent for the space occupied by the police court and without doubt an increased rental could be secured from the County.

We would further recommend that the entire police building be completely renovated. It is several years since this has been done and the building is very dirty and needs inside painting badly.

Respectfully submitted,

JOHN J. LESTER, *Chairman,*
AIME H. COTE,
CHARLES H. BUMP, JR.,
EUGENE J. SWEENEY,
ARCHER R. SIMPSON,
The Police Committee.

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ANNUAL REPORT

OF

CHIEF OF POLICE

To the Police Committee of the City of Springfield.

GENTLEMEN:—I herewith submit the Annual Report of the Chief of Police for the year ending November 30, 1921.

Respectfully submitted,

WILLIAM J. QUILTY,
Chief of Police.

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CITY OF SPRINGFIELD, MASSACHUSETTS.

1921.

Population	129,500
Area	39.90 square miles
Public streets	178.713 miles

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The following is a schedule and valuation of the property in charge of the Police Department:

Land	$63,433.00
Buildings	118,600.00
Signal system	15,500.00
Automobile equipment	6,000.00
Office equipment	3,500.00
Personal equipment	10,000.00
Total	$217,033.00

APPROPRIATIONS, EXPENDITURES.

Appropriation		$451,762.58
Expenditures	$451,739.93	
Balance	22.65	
		$451,762.58

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ROSTER OF THE DEPARTMENT.

OFFICERS OF THE DEPARTMENT.

Name.		Date of Appointment.
William J. Quilty,	Chief,	Mar. 7, 1887
Henry M. Perkins,	Deputy Chief,	May 14, 1883
Frank W. Quilty,	Capt. Detective,	Mar. 25, 1912
Martin P. Costello,	Captain,	Mar. 28, 1898
Charles A. Wade,	"	April 8, 1889
Edgar A. Littlefield,	"	June 30, 1896
John St. Ledger,	Det. Lieutenant,	July 12, 1888
James T. Raiche,	" "	Oct. 17, 1901
James M. Daly,	" "	Nov. 23, 1896
George H. Norris,	" "	Jan. 18, 1875
Daniel F. McCarthy,	" "	July 6, 1909
John A. McNeil,	" "	Jan. 14, 1908
Joseph A. Murphy,	" "	Jan. 14, 1908
Ernest P. Marble,	" "	Dec. 30, 1902
Joseph D. Powers,	" "	Jan. 22, 1907
Patrick J. Fenton,	" "	July 6, 1909
Matthew J. Meade,	" "	May 30, 1913
Michael J. O'Brien,	Lieutenant,	Feb. 15, 1897
Michael Kennedy,	"	July 13, 1900
John P. Fleming,	Det. Sergeant,	Mar. 5, 1917
George W. Bicknell,	" "	Feb. 26, 1918
Daniel J. Twohig,	Sergeant,	July 13, 1900
John L. Maloney,	"	Oct. 28, 1901
Harley H. Blodgett,	"	Feb. 7, 1911
John A. Swift,	"	Feb. 15, 1897
Patrick J. O'Connor,	"	Jan. 11, 1906
Michael F. Egan,	"	Mar. 22, 1897
Edwin C. Holbrook,	"	Sept. 1, 1903
John F. Donoghue,	"	Oct. 6, 1908
Frederick J. Runnells,	"	Jan. 11, 1906
John H. Dunleavy,	"	May 18, 1885
Thomas Moriarty,	"	Dec. 7, 1914
William J. Hurley,	"	April 3, 1906
Charles W. Geary,	"	Oct. 17, 1901
James W. Murtagh,	Patrolman,	Oct. 25, 1886
Michael C. Quinlivan,	"	Sept. 4, 1901
Ward E. Maranville,	"	May 23, 1892
Albert H. Shaw,	"	Mar. 11, 1895
James J. Donovan,	"	June 30, 1896
Patrick Keefe,	"	Mar. 22, 1897
Ovila L. Huot,	"	July 13, 1900
William J. Grady,	"	July 13, 1900
Timothy J. Hallahan,	"	Oct. 17, 1901

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Name.		Date of Appointment.
John F. Bacon,	Patrolman,	Oct. 17, 1901
James F. Dagnan,	"	Jan. 2, 1903
Alexander Gray,	"	Jan. 20, 1903
Patrick Lynch,	"	June 5, 1905
John P. Sullivan,	"	Oct. 18, 1905
Llewellyn D. Carey,	"	Jan. 2, 1907
William F. Goldrick,	"	Jan. 22, 1907
Michael F. Sullivan,	"	Jan. 22, 1907
Edward Carey,	"	June 27, 1907
Horace G. Clark,	"	Jan. 14, 1908
Frederick P. Smith,	"	Jan. 14, 1908
George F. Russell,	"	Jan. 14, 1908
James H. O'Brien,	"	Jan. 14, 1908
Durham N. Pepin,	"	Jan. 14, 1908
Clarence E. Bradway,	"	Jan. 14, 1908
James J. Collins,	"	Jan. 14, 1908
Bernard J. F. Bergren,	"	Jan. 14, 1908
Peter H. Walsh,	"	Jan. 14, 1908
William S. Bates,	"	Oct. 6, 1908
John A. Hamberg,	"	Aug. 16, 1910
John A. Driscoll,	"	Nov. 1, 1910
Charles Martens,	"	April 8, 1911
William J. Hogan,	"	June 7, 1911
George E. Lynch,	"	Mar. 25, 1912
Michael J. Flannery,	"	Mar. 25, 1912
Howard F. Tourtellotte,	"	Mar. 25, 1912
Edward J. Slattery,	"	Mar. 25, 1912
Michael J. Curley,	"	Mar. 25, 1912
Arthur H. Carrigg,	"	Mar. 25, 1912
Jeremiah B. O'Leary,	"	Mar. 25, 1912
John Hayes,	"	Mar. 25, 1912
Patrick J. Keane,	"	Mar. 25, 1912
Thomas F. Connery,	"	Mar. 25, 1912
Louis H. Pilon,	"	Mar. 25, 1912
Eugene F. Kelleher,	"	Mar. 25, 1912
James P. Gray,	"	April 17, 1912
Thomas L. Kavanaugh,	"	April 23, 1912
Mathew P. Ryan,	"	July 8, 1912
William F. Lonergan,	"	July 29, 1912
James J. Moylan,	"	Oct. 24, 1912
John H. St. Ledger,	"	May 30, 1913
John B. Carrigg,	"	May 30, 1913
Peter J. Marra,	"	May 30, 1913
Frederick C .Cullen,	"	Aug. 4, 1913
Thomas C. Fleming,	"	Mar. 29, 1914
John C. Driscoll,	"	April 26, 1914
Cornelius P. Brosnan,	"	April 26, 1914
Charles C. Learned,	"	April 26, 1914
Michael J. O'Brien,	"	April 26, 1914

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Name.		Date of Appointment.
Lovell S. Spaulding,	Patrolman,	April 26, 1914
John J. Maloney,	"	April 26, 1914
Arthur E. Clifford,	"	April 26, 1914
Edward D. Pepin,	"	April 26, 1914
Fred A. Champous,	"	April 26, 1914
Ralph J. Carleton,	"	April 26, 1914
John J. Donlin,	"	April 26, 1914
Ernest C. LaFleur,	"	April 26, 1914
James W. Pease,	"	April 26, 1914
Owen C. V. Sloan,	"	April 26, 1914
John H. McDonald,	"	April 26, 1914
George N. Riley,	"	April 26, 1914
John F. Hurley,	"	April 26, 1914
Harry R. Button,	"	April 26, 1914
Lyman B. Bullock,	"	Dec. 7, 1914
Ward C. Maranville,	"	Dec. 7, 1914
John J. Crowley,	"	Dec. 7, 1914
John P. Driscoll,	"	Dec. 7, 1914
Arthur H. Parker,	"	Dec. 7, 1914
Thomas F. Murphy,	"	Dec. 7, 1914
William F. Edmonds,	"	Dec. 7, 1914
George F. Henry, Jr.,	"	Dec. 7, 1914
James G. Taylor,	"	Dec. 7, 1914
Cornelius F. Dowd,	"	Dec. 7, 1914
Daniel J. Long,	"	Dec. 7, 1914
Albert J. Tessier,	"	Dec. 7, 1914
Thomas F. French,	"	Dec. 7, 1914
Frank J. McNeil,	"	Dec. 7, 1914
Peter McLelland,	"	Dec. 7, 1914
John J. Long,	"	Dec. 7, 1914
Philip E. Burke,	"	Jan. 18, 1915
Neil Bryson,	"	Feb. 15, 1915
Mitchel Frappier,	"	Feb. 15, 1915
Ellsworth C. Myers,	"	Sept. 5, 1916
Edward F. Cullinan,	"	Sept. 5, 1916
Charles J. Murphy,	"	Dec. 2, 1916
John P. Cleary,	"	Jan. 7, 1917
Louis C. Miller,	"	Mar. 5, 1917
Charles G. O'Malley,	"	Mar. 5, 1917
Lawrence V. Malone,	"	Mar. 5, 1917
Patrick Lovett,	"	Mar. 5, 1917
Michael F. Clancy,	"	Mar. 5, 1917
Charles M. Feeney,	"	April 25, 1917
John Lamondia,	"	Aug. 9, 1917
Rolla C. King,	"	Sept. 25, 1917
Edward L. Keating,	"	Oct. 1, 1917
William J. Wall,	"	Oct. 1, 1917
Paul H. Rice,	"	Nov. 12, 1917
Patrick M. Hurley,	"	Nov. 12, 1917

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Name.		Date of Appointment.
Patrick H. Meleady,	Patrolman,	Nov. 21, 1917
Edgar P. Tanguay,	"	Jan. 21, 1918
William H. Connor,	"	Jan. 21, 1918
Harry D. Foley,	"	April 29, 1918
John J. Maher,	"	April 29, 1918
John W. Harrington,	"	June 3, 1918
Percy F. Laming,	"	July 29, 1918
Victor M. Tetrault,	"	Aug. 2, 1918
Hugh J. Daley,	"	Aug. 8, 1918
Alfred H. Penfield,	"	Aug. 14, 1918
Charles W. Stetson,	"	Aug. 14, 1918
Dennis M. Lynch,	"	Aug. 14, 1918
Thomas H. Tuohey,	"	Sept. 8, 1918
Charles T. Long,	"	Sept. 25, 1919
Daniel W. Spellacy,	"	Sept. 25, 1919
William C. Sullivan,	"	Sept. 25, 1919
Ernest G. Tourtellote,	"	Sept. 25, 1919
Michael O'Connell,	"	Sept. 25, 1919
Daniel M. Keyes,	"	Oct. 6, 1919
Harold W. Poehler,	"	April 13, 1920
Leon A. Maloney,	"	April 13, 1920
Thomas C. St. Ledger,	"	April 13, 1920
Jeremiah J. Hurley,	"	April 13, 1920
William J. Pouliot,	"	April 13, 1920
James Moriarty,	"	May 29, 1920
Joseph A. Burke,	"	Aug. 4, 1920
Christopher J. Aspall,	"	Sept. 27, 1920
Lewis H. Aldrich,	"	Sept. 27, 1920
William P. Burke,	"	Sept. 27, 1920
Newman W. Sherman,	"	Oct. 11, 1920
James E. Fahey,	"	Dec. 6, 1920
James J. McMahon,	"	Dec. 20, 1920
John E. Sullivan,	"	July 7, 1921
Andrew Curran,	"	July 7, 1921
William Pollock,	"	July 7, 1921
Patrick J. Tuttle,	"	July 7, 1921
Daniel T. Sullivan,	"	July 7, 1921
Thomas O'Connor,	"	July 7, 1921
Patrick J. Bowler,	"	July 7, 1921
John J. Ford,	"	July 7, 1921
Edward J. Connelley,	"	July 7, 1921
Daniel J. McDonnell,	"	July 7, 1921
Michael J. Fitzgerald,	"	July 7, 1921
Maurice P. McKenna,	"	July 7, 1921
Henry C. Butler,	"	Oct. 17, 1921
Thomas P. Gaffney,	"	Oct. 23, 1921
Harry R. Avery,	"	Oct. 23, 1921
Raymond P. Bills,	"	Oct. 23, 1921

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Name.		Date of Appointment.
Andrew H. Boyd,	Patrolman,	Oct. 23, 1921
Joseph E. LeMoine,	"	Oct. 23, 1921
James J. Begley,	"	Oct. 23, 1921
George Scott,	"	Oct. 23, 1921
Thomas F. Sullivan,	"	Oct. 23, 1921
John J. Connor, Jr.,	Reserveman,	April 23, 1921
Farrell J. Fitzpatrick,	"	July 7, 1921
Francis J. Kenney,	"	July 7, 1921
Patrick Kennedy,	"	July 7, 1921
John J. Moriarty,	"	July 7, 1921
Lester C. Hammond,	"	July 7, 1921
Maurice V. Karlstrom,	"	July 7, 1921
James O'Donnell,	"	Sept. 21, 1921
Arvid G. Anderstrom,	"	Oct. 24, 1921
John A. Flanagan,	"	Oct. 24, 1921
Frank LaVoice,	"	Oct. 24, 1921
Cecil V. Bassett,	"	Oct. 24, 1921
Warren S. Fielding,	"	Oct. 24, 1921
Leonard S. Dorsey,	"	Oct. 24, 1921
Thomas J. Keating,	"	Oct. 24, 1921
James E. Goggin,	"	Oct. 24, 1921
Stephen B. Webster,	"	Oct. 24, 1921
Alfred L. Brouillet,	"	Oct. 24, 1921
Thomas Dunne,	"	Oct. 24, 1921
Michael Ashe,	"	Oct. 24, 1921
Paul L. Henry,	"	Oct. 24, 1921
Thomas Lohan,	"	Oct. 24, 1921
Ralph J. Brennan,	"	Oct. 24, 1921
Ira E. Klase,	"	Oct. 24, 1921
John J. Connelly,	"	Oct. 24, 1921
Daniel J. Shea,	"	Oct. 24, 1921
Thomas Dowling,	"	Oct. 24, 1921
Mary F. Lathrop,	Policewoman,	Oct. 21, 1918
H. Elizabeth O'Connor,	"	Oct. 21, 1918
Mrs. Delia E. Flanagan,	Matron,	
Mrs. Katherine Sheehan,	"	

DETAILED.

Harry R. Button,	Chauffeur
Ellsworth C. Myers,	"
Lyman B. Bullock,	"
Edward F. Cullinan,	"
William J. Wall,	"
Patrick H. Meleady,	"

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EMPLOYEES.

Miss Anna A. Kelliher,	Department Clerk
Mrs. Helen R. Keefe,	Clerk
Miss Bertha M. Saunders,	"
Miss Kathryn F. Collins,	"
John H. Madden,	Prosecuting Attorney
Herbert H. Berry,	Electrician
Miss Grace M. Conway,	Telephone Operator
Miss Esther W. Burlingham,	" "
Thomas A. Pollard,	Janitor
Michael J. Harrington,	"
Robert E. Creighton,	"

RETIRED.

Charles M. Wright,	Deputy Chief
John H. Boyle,	" "
John J. O'Malley,	Captain
Charles A. Haynes,	Inspector
James C. Burke,	"
John Hall,	Sergeant
E. Frank Goodwin,	"
Patrick J. McCallin,	"
George L. DeForest,	Patrolman
Thomas Ranney,	"
Ernest Rosenberg,	"
Edgar A. Kirk,	"
James H. Rogers,	"
Thomas B. Drinan,	"
Simon J. Connery,	"
Edward P. Tilton,	"

COMPOSITION OF FORCE.

Chief	1
Deputy Chief	1
Captain of Detectives	1
Captains	3
Detective Lieutenants	11
Lieutenants	2
Detective Sergeants	2
Sergeants	13
Patrolmen, Grade A	126
Patrolmen, Grade B	11
Patrolmen, Grade C	23
Policewomen	2
Reservemen	27
Department Clerk	1
Clerks	3

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Chauffeurs	6
Matrons	2
Telephone Operators	2
Superintendent of Signal System	1
Janitors	3

RETIRED.

Deputy Chiefs	2
Captain	1
Detective Lieutenants	2
Sergeants	3
Patrolmen	8

NUMBER OF LICENSES ISSUED AND FEES COLLECTED DURING THE YEAR ENDING NOVEMBER 30, 1921.

34	auctioneers	$68.00
10	bowling alleys	20.00
261	express (366 wagons)	596.96
130	farmers' permits	32.50
109	fruits and vegetables	2,725.00
14	intelligence offices	28.00
29	jitneys	2,900.00
43	jitney operators	43.00
8	pawnbrokers	375.00
70	poolrooms	1,320.00
82	rag pickers	321.22
68	second hand dealers	136.00
9	street musicians	2.25
88	taxicab drivers	88.00
60	agent's license, Class 1	300.00
56	used car dealer's license, Class II	280.00
10	motor vehicle junk license, Class III	50.00
	Lock-up fees	207.75
	Miscellaneous sales	1,637.61
	Total	$11,044.17

TOTAL NUMBER OF DAYS LOST BY SICKNESS, ABSENCE, AND VACATION BY MEMBERS OF THE DEPARTMENT.

Total number on special duty	2,239
Total number on sick list	1,474
Total number on vacation	2,250
Total number on leave of absence	302
Total number without leave of absence	1
Total number days off	8,756
Total number suspended	125

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MISCELLANEOUS DUTIES.

Accidents reported		1,142
Buildings open and secured		1,469
Defective streets reported		61
Defective sidewalks reported		142
Disturbances suppressed		2
Disorderly houses reported		29
Electric lights out		1,190
Fire alarms given		6
Fire alarms reported		190
Fire extinguished by officers		4
Intoxicated persons sent home		6
Lost children restored		99
Teams put up		2
Number of posters censored		4,174
Approved	3,970	
Disapproved	204	

ACCIDENTS REPORTED BY POLICE OFFICERS.

For the Year Ending November 30, 1921.

Accidental shooting	5
Asphyxiation	5
Automobiles	850
Bicycles	47
Bitten by dog	2
Drowning	10
Explosion	3
Fainting	2
Falls	42
Falling objects	5
Fits	3
Motorcycles	32
Runaway horses	1
Steam railroads	6
Sudden deaths	5
Suicides	2
Suicide attempted	1
Teams	24
Trolley cars	97
Total	1,142

An inspection of the records of these accidents shows that in 194 cases the pedestrian was to blame. There were 21 deaths from automobile accidents.

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AUTOMOBILE SERVICE.

	White Police Van.	Knox Police Van.	Touring Car.
Regular runs	1,856	1,594	3,556
Emergency runs	248	33	3
Fire runs	60	30	1
Total runs	2,164	1,557	3,566

	Touring Car.	White Police Van.	Knox Police Van.	Total.
Miles run	1,807	5,386	3,478	10,671
Gasoline used	252	941	677	1,870
Oil used	2	48	20	70

Patrol automobiles, twelve months, ending November 30, 1921:—

	No. 1 Ford.	No. 2 Ford.	No. 3 Ford.	No. 4 Ford.	No. 5 Ford.	Total.
Miles run	5,330	18,748	17,163	3,585	4,946	49,808
Gasoline used	385	1,332	1,353	472	452	3,994
Oil used	9	25	49	15	14	111

	No. 1 Motocycle.	No. 2 Motocycle.	No. 3 Motocycle.	Total.
Miles run	7,791	7,870	7,793	23,454
Gasoline used	308	299	287	994
Oil used	26	25	26	77

Tires and Tubes for 8 cars and 3 motocycles:—

	28 x 3	30 x 3	30 x 3½	34 x 4½	37 x 5	Total.
Tires	4	1	15	1	6	27
Tubes	2	4	16	1	6	29

Cost of tires	$470.92
Cost of tubes	203.39
Cost of gasoline	1,986.39
Cost of oil	203.50
Total	$2,864.20

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CHARGES ON WHICH ARRESTS WERE MADE.

CRIMES AGAINST THE PERSON.

	1917	1918	1919	1920	1921
Assault and battery	213	182	133	115	163
Assault on officer	22	17	12	19	19
Assault with deadly weapon	24	25	17	12	14
Assault with intent to kill	1	8	1	3	8
Assault, indecent	1	8	3	4	3
Assault and robbery	2	0	4	9	2
Assault, attempt to rob	0	0	5	0	1
Manslaughter	2	3	0	0	4
Mayhem	0	0	0	1	0
Murder	2	2	2	5	4
Rape	3	5	6	6	2
Rape, attempt	1	1	1	1	2
Robbery	0	0	0	4	5
Threatening	2	2	1	3	3
	273	253	185	173	230

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CRIMES AGAINST PROPERTY.

	1917	1918	1919	1920	1921
Accessory to defraud	0	0	0	0	1
Arson	0	2	1	0	0
Breaking and entering	61	59	52	46	71
Breaking and entering, attempt	2	4	1	2	1
Breaking glass	13	10	10	7	5
Concealing leased property	1	1	1	2	5
Concealing mortgaged property	1	0	1	0	0
Defacing a building	0	0	6	0	0
Defrauding an insurance company	1	0	0	0	2
Defrauding an insurance company, attempt	0	0	3	0	0
Destroying property	13	3	8	10	1
Driving away an auto	28	22	25	12	25
Driving away a team	0	2	0	0	0
Embezzlement	1	0	0	0	0
Evading railroad fare	3	4	12	6	94
Fortune telling	0	0	1	1	0
Injuring personal property	7	0	0	4	7
Injuring a shade tree	0	0	0	1	0
Larceny	317	320	247	242	284
Larceny, attempt	4	3	3	2	5
Larceny from common carrier	13	15	9	7	0
Larceny from the person	2	6	8	8	4
Larceny from the person, attempt	1	0	0	0	0
Larceny in a building	8	19	6	10	9
Malicious mischief	9	9	11	7	7
Placing explosives on street car tracks	0	0	0	2	0
Receiving stolen goods	19	12	16	17	10
Removing and concealing personal property	2	3	3	3	0
Retaining city library books	0	1	0	0	0
Selling leased property	1	2	0	1	0
Selling mortgaged property	0	3	0	0	2
Setting bonfires	0	0	0	5	0
Stealing a ride	3	0	0	0	0
Trespass	22	13	11	19	18
Trespass of fowls	0	1	0	1	0
Unlawful taking	6	0	0	0	0
	538	514	435	417	551

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CRIMES AGAINST THE PUBLIC ORDER.

	1917	1918	1919	1920	1921
Abandoning child	0	0	1	2	3
Abandonment	15	13	10	15	8
Abortion	2	0	0	0	0
Abortion, accessory to	1	0	0	0	0
Absent without leave from U. S. Army and Navy	0	10	17	9	2
Accessory before fact	0	0	0	3	1
Adultery	15	81	39	23	16
Allowing minors in poolroom	0	0	1	1	0
Bastardy	33	19	12	20	42
Being present at illegal game	2	0	0	2	0
Bench warrant	0	0	2	0	0
Bigamy	3	2	1	1	4
Book making	0	0	0	1	0
Breach of the peace	143	138	89	47	62
Bribery, attempt	0	0	0	0	1
Buying junk from minors	1	0	2	0	0
Carrying concealed weapons	37	30	36	56	28
Committing a nuisance	1	0	0	0	0
Common brawler	1	2	0	0	0
Common night walker	8	24	12	6	0
Contempt of court	3	2	0	0	0
Crime against chastity	2	4	6	3	0
Cruelty to animals	5	5	1	1	2
Defaulted	0	0	6	3	0
Delinquents	26	11	8	17	5
Deserters	4	10	10	7	8
Disorderly conduct	25	36	13	6	25
Disorderly house, keeping	10	11	2	6	0
Disturbing a meeting	7	15	8	8	4
Disturbance on street car	7	0	1	0	0
Doorkeeper in gambling house	0	1	0	0	0
Driving away after an accident	0	0	0	0	1
Drunkenness	2,473	1,336	792	619	895
Escaped lunatic	0	0	0	2	0
Escaped from Lyman School	3	0	0	0	0
Escaped prisoner	0	6	6	13	11
False advertising of cigars	0	1	0	0	0
Forgery	0	0	5	1	2
Fornication	34	108	67	21	33
Fugitive from justice	120	142	120	127	103
Furnishing liquor to soldiers	15	11	3	0	0
Gambling	143	67	129	63	107
Gaming on Lord's Day	45	52	34	12	0
Giving liquor with intent to drug	0	0	0	0	1
Habitual truant	0	0	0	1	0
Having lottery tickets in possession	0	0	0	0	1
Having obscene literature	0	1	0	0	1
Having obscene pictures	0	0	1	0	0

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	1917	1918	1919	1920	1921
Having unstamped veal	0	0	1	0	0
Having watered milk in possession	0	0	10	0	0
Hunting without a license	0	2	1	0	0
Impersonating an officer	0	0	1	0	0
Impersonating a soldier	0	0	1	1	0
Indecent exposure	4	6	2	4	10
Insane	42	29	27	36	26
Keeping gambling house	7	5	4	1	1
Keeping house of ill-fame	0	0	3	0	0
Keeping a liquor nuisance	2	0	0	0	0
Keeping lodging house without a license	0	1	2	0	0
Keeping a lottery	0	0	0	0	1
Keeping restaurant without license	0	0	2	0	0
Keeping unlicensed dog	17	1	4	1	4
Lewd and lascivious conduct	0	11	5	0	13
Lewd and lascivious cohabitation	31	47	32	47	45
Mutilating U. S. flag	3	0	0	0	0
Neglected children	0	24	15	0	0
Neglecting to notify State Board of Charity	0	0	1	0	0
Neglecting to report to State Board of Health	0	0	1	0	0
Non-support	153	120	130	117	113
Non-support of parents	0	14	0	0	0
Not furnishing heat	0	0	0	1	2
Not furnishing water to tenant	0	0	0	0	2
Not recognizing to police court	1	0	0	0	0
Operating auto so as to endanger lives	0	0	9	16	4
Operating auto while under influence of liquor	28	29	27	26	10
Operating steam boiler without license	0	0	1	0	0
Operating unlicensed garage	0	0	1	0	0
Overloading a truck	0	0	0	0	3
Peddling without a license	13	18	0	1	1
Perjury	0	3	0	0	0
Placing obstruction on street car tracks	2	0	2	0	0
Polygamy	0	2	1	1	1
Practicing dentistry without license	0	0	2	0	0
Private detective without license	0	1	0	0	0
Profane and indecent language	13	7	4	7	21
Promoting a lottery	0	0	4	0	3
Reckless driving	19	5	5	1	0
Refusing to remove dog	0	0	0	2	5
Riding bicycle on sidewalk	0	0	0	4	0
Ringing false fire alarm	1	0	3	3	3
Resisting an officer	0	2	0	0	0
Runaways	120	127	140	120	105
Selling cigarettes to minor	0	0	1	0	0
Selling fireworks without a permit	1	0	0	0	0
Selling unstamped veal	0	0	1	0	0

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	1917	1918	1919	1920	1921
Selling watered milk	0	0	1	0	0
Signing false name to hotel register	0	4	0	0	0
Sodomy	0	0	0	1	0
Storing explosives without a permit	1	0	0	0	0
Straggler from U. S. Navy	1	0	0	0	0
Stubborn and disobedient	22	19	17	24	11
Suspicion	345	337	314	400	428
Unnatural act	5	1	0	3	3
Using stable without license	0	0	2	2	0
Vagrancy	140	100	75	70	76
Violating anti-loafing law	0	37	0	0	0
Violating bottle law	2	6	4	0	4
Violating city ordinances	186	115	35	97	421
Violating curfew law	0	0	0	2	0
Violating cold storage law	0	0	0	18	0
Violating draft law	11	232	0	0	0
Violating drug law	6	1	8	1	4
Violating eight foot law	0	1	5	13	1
Violating employment law	2	0	0	3	15
Violating fireworks law	0	0	0	1	1
Violating food law	0	7	1	11	34
Violating game law	0	3	0	2	1
Violating garage law	0	0	0	1	0
Violating garbage law	0	0	0	1	2
Violating gasoline law	2	0	0	0	0
Violating health law	0	0	4	1	2
Violating immigration law	0	1	0	0	0
Violating infant boarding house law	0	0	0	0	2
Violating insurance law	0	1	0	0	0
Violating jitney ordinance	0	6	8	12	1
Violating labor law	0	1	11	0	0
Violating license law	4	0	0	0	0
Violating liquor law	47	51	41	60	287
Violating Lord's Day	24	5	12	8	9
Violating lottery law	2	0	0	0	0
Violating masher act	0	0	0	9	0
Violating medical registration law	2	0	1	4	0
Violating milk law	0	0	0	6	0
Violating motor vehicle laws	376	253	144	289	347
Violating oleomargarine law	0	0	2	5	0
Violating park ordinances	3	15	4	0	0
Violating parking ordinance	0	0	0	354	124
Violating probation	162	114	89	106	117
Violating plumbing law	0	1	0	0	1
Violating school law	2	0	0	1	0
Violating speed law	0	0	0	9	8
Violating state electric law	0	1	0	0	0
Violating traffic law	64	20	51	84	28
Violating true name law	0	0	6	3	4
Violating United States postal law	1	0	0	0	0

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	1917	1918	1919	1920	1921
Violating vehicle light law	0	0	0	0	2
Violating Volstead Act	0	0	0	12	0
Violating weights and measures law	8	26	8	15	1
Walking railroad tracks	32	38	53	56	110
Wearing U. S. Army uniform without right	0	1	0	0	0
Witnesses, held by Court	0	0	0	0	4
	5,091	3,988	2,773	3,167	3,793

RECAPITULATION.

	1917	1918	1919	1920	1921
Total crimes against the person	273	253	185	173	230
Total crimes against property	538	514	435	417	551
Total crimes against the public order	5,091	3,988	2,773	3,167	3,793
	5,902	4,755	3,393	3,757	4,574

NATIVITY OF PRISONERS.

	Males.	Females.		Males.	Females.
Armenia	1	0	Ireland	151	10
Australia	62	1	Italy	249	18
Austria	2	7	Norway	3	0
Belgium	4	0	Poland	57	9
Bohemia	2	0	Portugal	8	1
Canada	125	8	Roumania	1	0
China	28	0	Russia	278	37
Denmark	1	0	Scotland	19	0
England	28	3	South America	4	0
Finland	21	0	Sweden	15	2
France	6	0	Syria	21	3
Germany	14	2	Turkey	3	0
Greece	37	1	United States	2,294	248
Holland	2	0	Unknown	778	0
Hungary	1	0	West Indies	8	1

Total, Males, 4,223; Females, 351.

Total, 4,574.

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CLASSIFICATION OF AGES OF PRISONERS.

Ages.....	10–20	21–30	31–40	41–50	Over 50	Unknown	Total
Males....	1,635	1,265	733	391	199	0	4,223
Females..	67	141	82	44	17	0	351
Total arrests.....							4,574

RECORD OF JUVENILE CASES.

Offenses.

Assault and battery	2	Larceny from person	2
Attempt to break and enter	5	Larceny in building	6
Breaking and entering	9	Lewdness	1
Breach of peace	1	Malicious injury to property	10
Breaking glass	1	Neglected children	20
Carrying revolver	1	Peddling newspapers without license	1
Distributing obscene literature	1	Profanity	1
Disturbance on street car	4	Receiving stolen goods	1
Disturbing library	3	Stubbornness	14
Driving away team	4	Throwing missiles	16
Evading railroad fare	1	Trespass	3
False alarm of fire	5	Truants	29
Fornication	1	Unnatural act	1
Habitual school offender	9	Vagrancy	3
Indecent assault	1	Violation of auto law	11
Indecent language	1	Violation of probation	14
Larceny	126	Walking on railroad track	2
Total			310

Disposition of Cases.

Committed to Lancaster	7	Suspended sentence to Lancaster	3
Committed to Lyman School	12	Suspended sentence to Lyman School	20
Committed to Shirley	11	Suspended sentence to Mass. Reformatory	2
Committed to State Department of Public Welfare	12	Suspended sentence to Shirley	15
Committed to Truant School	9	Suspended sentence to Truant School	13
Continued day to day	7		
Discharged	10	Total	310
Dismissed	2		
Filed	49		
Fined	12		
Probation	126		

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REPORT OF THE MATRONS.

	Female Prisoners.	Female Lodgers.	Lost Children.
December	23	0	9
January	24	0	9
February	26	1	25
March	47	0	13
April	40	0	15
May	27	0	22
June	18	0	14
July	26	1	8
August	26	0	1
September	19	0	7
October	31	0	6
November	44	0	3
	351	2	132

OFFENSES.

Abandoning child	3
Adultery	8
Assault and battery	8
Carrying dangerous weapon	1
Drunkenness	39
Fornication	18
Fugitive from justice	3
Idle and disorderly	5
Insane	18
Larceny	30
Lewdness	12
Lewd and lascivious cohabitation	22
Neglected children	1
Receiving stolen goods	1
Runaway	11
Stubborn and disobedient	10
Suspicion	21
Vagrancy	18
Violation of city ordinance	30
Violation of drug law	1
Violation of liquor law	63
Violation of motor vehicle law	1
Violation of probation	25
Witness	2
Total	351

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ARRESTS OF INDIAN ORCHARD POLICE STATION NO. 2.

Assault	1
Assault and battery	7
Assault dangerous weapon	2
Attempt to break and enter	1
Breaking and entering	3
Bastardy	2
Carrying revolver	1
Drunkenness	26
Deserter	1
Default	1
Disturbing public library	1
Escaped from Shirley	1
Fugitive from justice	8
Illegal liquor selling	1
Illegal liquor keeping	1
Larceny	9
Lewd and lascivious	2
Non-support	5
Operating auto without license	2
Placing explosives on street railway tracks	1
Profanity	1
Runaway boy	3
Suspicion	6
Stubborn child	1
Vagrancy	3
Violation of auto light law	1
Violation of parole	1
Violation of probation	4
Violation of city ordinance	9
Total	105

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TABULATED STATEMENT OF ARRESTS

For the Year Ending November 30, 1921.

MONTHS.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Totals
Males	338	295	330	435	395	297	398	331	443	309	352	300	4,223
Females	23	24	26	47	40	27	18	26	26	19	31	44	351
Minors	56	54	50	69	110	64	73	62	71	72	84	69	834
Adults	305	265	306	413	325	260	343	295	398	256	299	275	3,740
Residents	260	227	290	358	305	223	309	260	319	218	281	268	3,318
Non-Residents	101	92	66	124	130	101	107	97	150	110	102	76	1,256
Americans	244	218	215	321	309	213	279	240	288	206	239	220	2,992
Foreigners	117	101	141	161	126	111	137	117	181	122	144	124	1,582
Totals	361	319	356	482	435	324	416	357	469	328	383	344	4,574

DISPOSITION OF CASES.

Fined and Paid	82	73	103	161	84	56	77	50	82	44	67	69	948
Fined and Committed	24	13	10	28	33	26	24	31	40	32	30	22	313
Committed for Sentence	24	27	10	23	24	20	9	16	47	18	23	27	268
Probated	25	31	40	38	59	47	49	49	54	50	45	37	524
Continued	190	213	225	235	259	235	270	297	251	180	250	242	2,847
Appealed	8	27	11	4	8	4	2	4	1	1	7	33	105
Bound Over to Grand Jury	2	1	4	1	5	3	2	3	2	4	7	3	37
Released	41	38	26	45	70	54	53	68	46	55	48	43	587
Discharged	6	9	5	5	11	14	11	14	9	6	7	6	103
Cases Pending	81	81	53	100	108	84	83	56	137	59	77	99	1,018
Filed Away	46	44	69	85	66	58	108	73	101	59	50	42	796

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REPORT OF

WATER COMMISSIONERS

FOR 1921

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CITY OF SPRINGFIELD, MASSACHUSETTS,
MUNICIPAL WATER WORKS.
1922.

BOARD OF WATER COMMISSIONERS.

EDWIN A. BLODGETT, *Chairman.*	Term expires February 1, 1923.
Dr. GEORGE L. FENN,	Term expires February 1, 1924.
EDWIN F. LEONARD, *Mayor,*	ex officio.

SUPERINTENDENT.

ALFRED E. MARTIN—(to February 21, 1922).*
HOWARD M. KING—(from March 6, 1922).*

WATER REGISTRAR AND CLERK OF BOARD:

ALFRED R. HATHAWAY.

CHIEF ENGINEER:

ELBERT E. LOCHRIDGE.

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*Since this report was submitted the death of Superintendent Martin necessitated the change shown above, together with resolutions as shown on following page, all of which are herein recorded by courtesy of the printer.

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RESOLUTIONS

Adopted by the Board of Water Commissioners of the City of Springfield, March 13, 1922.

Whereas:—The death of ALFRED E. MARTIN (which occurred on February 21, 1922) has terminated his nineteen years of loyal and valuable service as Superintendent of the Municipal Water Works of Springfield, and has removed from among us an able public official and an upright citizen; be it hereby

Resolved:—That we, the Board of Water Commissioners of Springfield, desiring to recognize and record his sterling worth and excellent services, hereby testify to his faithful and conscientious attention to the duties of his office, and to the painstaking and efficient manner in which such duties were always performed;

Resolved:—That we profoundly lament his decease and tender our deep sympathy to his relatives in their bereavement;

Resolved:—That these resolutions be entered in the records of the Board of Water Commissioners and that the Clerk of the Board be hereby directed to transmit a copy of the same to Mr. Martin's relatives.

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WATER COMMISSIONERS' REPORT

WATER COMMISSIONERS' OFFICE,
ADMINISTRATION BUILDING,
SPRINGFIELD, MASS., December 29, 1921.

To the City Council of the City of Springfield, Mass.

GENTLEMEN:—The Board of Water Commissioners herewith submits the forty-eighth annual report of the Municipal Water Works of the City of Springfield for the fiscal year ending November 30, 1921.

The total *earnings* (not cash receipts) credited during the year past have been as follows:—

Net water charges to private consumers,	$479,180.87
Water service to municipal departments (uncollectible per city ordinance),	71,540.11
Water used by water works and included in its operating expenses,	64.75
Total,	$550,785.73

The resulting total *decrease* from the preceding year's corresponding earnings is shown by the following differences:—

Decrease in *net* charges to private consumers,	−$11,592.55
Decrease in municipal service earnings,	−4,918.93
Increase in water works self-service,	+.45
Net resulting *decrease* (as above),	$16,511.03

A comparison of the classification of earnings charged to private consumers during the two years shows that, while the domestic and commercial class and the suburban class remained about the same, the industrial class fell off more than 18 per cent the past year, and the amount for builders' use (while not one of the large classes) fell off more than 30 per cent; the entire comparison confirming the natural results to be expected from the post-war conditions of industrial depression and widespread unemployment. In normal times and under pre-war conditions we should

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of course look not only to the wiping out of any such decreased earnings here shown but also to sizeable increase in each of the several classifications during any such year. Indications are now noted for an increase in industrial and building activities the coming year, which it is hoped may be the beginning of better times.

The following is a summary of the total *cash accounts* of the past year and the disposition of the cash funds:—

CASH RECEIPTS.

From collections of water bills by City Collector,.	$474,946.02	
From collections of sales bills by City Collector,..	81,542.11	
		$556,488.13
From sundry refunds to City Treasurer,.....		461.35
From transfer of "Lombard Reservoir Lot Fund" from reserves to 1921 current revenue account, as partial reimbursement of expenditures from latter account for improvement work on the former reservoir property,.....		691.00
Total,.....		$557,640.48

DISPOSITION OF SAME.

For payment of approved bills sent to City Auditor,.....	$154,552.01	
For payment of approved pay rolls sent to City Auditor,.....	230,498.67	
		$385,050.68
For payment of interest on water bonds,.....	$62,815.00	
For payment water bonds becoming matured,...	89,000.00	
		151,815.00
Payments charged against current revenues,.....		$536,865.68
For payment of adequate amount to Water Works Sinking Fund,.....		6,000.00
For amount transferred to "Reserve Fund for Deferred Work,".....		14,774.80
Total,.....		$557,640.48

At the beginning of the year it was seen that conditions would not warrant a probable increase in the annual estimate of receipts from water sales for the current year, and such estimate was then placed at about the total receipts for the preceding year, subject to revision as the progressive results became known.

After six months it was seen that receipts were falling short of the tentative estimate which was then reduced and placed at about $475,000,

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and this amount proved to be almost exactly the total received for water sales during the year, as shown by the foregoing summary.

As the municipal water works is rightfully expected to be a self-supporting public service enterprise, and is so conducted by your Board of Water Commissioners, its finances are closely watched at all times and, while there is much needed improvement work to be done in order that the distribution system may furnish adequate fire protection and other service in the constantly growing sections of the city, only such work is ordered each year as we feel may be safely undertaken and paid for from the surplus receipts, after providing for the operating and maintenance requirements and for the annual obligations on account of the bonded water debt.

Much work of an improvement nature has been planned for and temporarily deferred until better cost conditions shall prevail, and to the $20,000 set aside last year for this purpose has been added the sum of $14,774.80 from the current year's receipts, making a total of $34,774.80 available for use towards this class of expenditures whenever needed in addition to current annual revenues.

The total expenditures during the past year, besides the cost of operation, maintenance, renewals, bond interest and payments, and sinking fund contribution, included also capital costs of $162,606.75 for additions to the plant, property, and equipment. Some of the principal items of such capital costs are $118,356.70 for extensions of distribution mains, including gates; $12,728.43 for fire hydrants installed; $7,701.45 for utility equipment; $1,228.66 for completion of chemist's house at West Parish filters; and $15,146.10 for purchase of two tracts of land with two houses on same and adjoining the water works service station on Colton street on the north. Both these properties were in the market to settle estates, and will be needed for future use in connection with the service station and its growing demands. In order that advantage might be taken by purchasing gasoline at car-load prices, a 10,000-gallon storage tank was installed early in the year at the Colton street service station at a total cost of $1,154.59. The saving on subsequent purchases of gasoline has already amounted to more than the cost of such installation, and has therefore fully justified this capital expenditure. No contracts for cast-iron pipe were made in 1921, as a goodly stock from the 1920 contracts has been available for the main pipe work done during the past year.

Forestation work has been continued to the amount of $1,815.85 on the Little River watershed and $339.47 on the Ludlow property.

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The total capital-cost of the water works plant, property, and equipment at the close of the year now amounts to $5,668,231.04, and the City of Springfield's equity in the enterprise is $3,809,063.35.

The net total bonded debt on account of the water works has been reduced by $100,087.04 during the year, and now stands at $1,503,933.31, shown as follows:—

Ludlow supply 4% sinking fund bonds, due October 1, 1923,	$150,000.00
Little River supply 3½% serial bonds, $59,000 due annually,	1,007,000.00
Little River supply 4% serial bonds, $20,000 due annually,..	310,000.00
Little River supply 4¼% serial bonds, $10,000 due annually,	170,000.00
Total bonds outstanding November 30, 1921,.....	$1,637,000.00
Less amount in sinking fund for Ludlow supply bonds,..	133,066.69
Net bonded water debt November 30, 1921,.....	$1,503,933.31

The foregoing reduction in the bonded debt was met from water works revenues and earnings of the water works sinking fund, as heretofore.

The fixed charges to the water works revenues on account of the bonded debt during the coming year will be as follows:—

Interest on Ludlow supply bonds,.....	$6,000.00	
Interest on Little River supply bonds,.....	53,525.00	
Total interest requirements,.....		$59,525.00
Little River supply serial bonds due in 1921,..	$89,000.00	
Adequate amount for sinking fund for retirement of Ludlow supply bonds in 1923,.....	6,000.00	
		95,000.00
Total 1922 requirements for bonded debt,		$154,525.00

The city has been amply supplied from the Little River system during the past year with water of the usual superior quality, and the filtration system has continued its good work of previous years.

During the long continued absence of rainfall in the summer months, the water in the Borden Brook reservoir was drawn down to a lower level than for several years, leaving, however, sufficient quantity to meet all demands until the fall rains came.

The daily average consumption of water supplied from the system has been 12,870,000 gallons, this being a decrease from the 1920 consumption.

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The usual supplies have been furnished during the year to the neighboring towns of Agawam, East Longmeadow, and Ludlow (the latter having filtered Ludlow supply in the summer and direct Ludlow supply the rest of the year), while Chicopee and West Springfield have been taken care of during portions of the year as needed.

The following tabulation in usual form will show the metered and estimated consumption of water by the different municipal departments of the city, together with the total value of same or *accrued earnings* from such service, as entered on the books for the year past and charged off as uncollectible per city ordinance.

MUNICIPAL USE OF WATER.—1921.

(☞ Unmetered quantities in gallons are *estimated* from amounts, on basis of 6⅔ cents per 1,000 gallons,—or equivalent of 5 cents per 100 cubic feet.)

Classification.	Amounts.	Gallons.	Memo.
Schools,.....	$10,333.20	154,998,000	93% metered
Public Buildings (except schools),.....	3,216.27	48,244,050	88% metered
Public Parks,.....	2,661.10	39,916,500	67% metered
Public Playgrounds,.....	439.90	6,598,500	2% metered
Building Purposes (Streets and Engineering Department),	405.65	6,084,750	Unmetered
Sewer Department (flushing),.	2,000.00	30,000,000	Unmetered
Snow Removal,.....	830.66	12,460,000	Metered
Street Washing and Sprinkling,	1,743.33	26,150,000	Unmetered
Watering Tanks and Drinking Fountains,.....	585.00	8,775,000	Unmetered
Total of above,.....	$22,215.11	333,226,800	
Fire Hydrant Service,.....	49,325.00	(Not reducible to quantities)	At $25 per hydrant
Total Municipal Use,..	$71,540.11	(as per Registrar's report)	

It is hoped that the financial conditions in the near future will permit the resumption of meter installations on a portion of the remaining unmetered services for municipal uses, in order that such consumption of water may be better accounted for.

Early in the summer the residents in the neighborhood of the former Lombard reservoir complained that the place constituted a menace and a nuisance to the community, several drowning accidents having occurred

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there and an undesirable element frequenting the spot, and an urgent request was made that the reservoir hole be drained. This work was therefore undertaken, although proving somewhat difficult on account of the condition of the old reservoir structures, and the sum of $1,071.68 was expended for the purpose.

The 36 inch cast-iron circuit main in Water street, between Bridge and Court streets, has been removed and relocated to conform to the grade changes necessitated by the construction of the new Connecticut River bridge and its approaches. This work has cost $8,259.36, including also necessary changes in main pipe and connections for side streets.

For the details of operation and annual results reference is invited to the reports of the Registrar, the Superintendent, and the Chief Engineer, to the Board; which reports are hereby appended and made a part of this report to the City Council.

Respectfully submitted,

EDWIN F. LEONARD,
GEORGE L. FENN,
EDWIN A. BLODGETT,
Board of Water Commissioners.

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WATER REGISTRAR'S REPORT

DECEMBER 29, 1921.

To the Board of Water Commissioners of the City of Springfield, Mass.

GENTLEMEN:—I herewith submit the annual report of the Water Registrar, for the fiscal year ending November 30, 1921.

As this report is entirely financial by nature, the accounting results are shown by the tabulated statements following, and in accordance with the accounting system and classification adopted by your Board and in use since December 1, 1913.

Beyond the showing of these tabulated statements there appears to be very little worthy of special comment at this time.

The customary estimate at the beginning of the year as to probable cash receipts was placed at practically the same amount received for the previous year, as no indicated increase was then apparent. The trend of bills committed to the Collector and collection of same was carefully watched for several months, and in the middle of the year the initial estimate of water receipts was reduced to $475,000 (or $10,000 less than first estimated), and the final total of such receipts for the year almost exactly agreed with this figure, as will be seen by the summary of cash receipts submitted.

In the accrual statement of operating revenues, operating expenses and other deductions, it will be noted that the net income for the year is much less than in previous years. This appears to be due, not only to the falling off of operating earnings, but also to increase of operating expenditures.

During the coming year it is hoped that better conditions will bring normal increased revenues and a reduction in costs.

As stated in previous reports it was expected that the matter of bringing the rules and regulations up to date and the arrangement for mailing bills to consumers (all involving much investigation and study) might have been completed and submitted to your Board for consideration, but continuous and insistent demands upon the Registrar's time throughout the past year have again precluded bringing about this improvement in the manner it should be done.

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It is with an unusual sense of personal loss that I here record the death of Mr. George F. Farmer, who for so many years has been known as "Inspector No. 1," in the Registrar's division of the Springfield Water Works and who was my loyal and helpful associate from the beginning of my connection with the department to his last illness. Mr. Farmer has given over fifty-four years of continuous service to the water works in Springfield, having first been employed for nearly five years by the Springfield Aqueduct Company as bookkeeper and paymaster, as well as collector, from 1867 to 1872, at which time the City of Springfield purchased the private company's plant. From that time to the day he entered the hospital he remained with the Municipal Water Works during a period of over forty-nine years, first as bookkeeper and collector and later as the first inspector; and throughout his more than fifty-four years of service he was always the faithful and dependable employee of what we sometimes call the "old-fashioned" type, with a deep sense of loyal obligation to his employers and his work. He was noted for his painstaking and accurate fulfillment of his duties, and insisted upon keeping at work up to within two weeks of his death, which occurred on December 5, 1921, at the age of 76 years and 8 months. He will be missed as a public servant and as a citizen, as well as by all of his immediate associates, and it is deemed fitting that the foregoing acknowledgment of his worth be here recorded.

The financial results of operation for the past year, the assets and liabilities at the close of the year, and the summary of cash receipts and expenditures, with supporting detail tabulations,—all in the customary commercial grouping,—are submitted in the following order:—

INCOME AND PROFIT AND LOSS ACCOUNT, in condensed form, followed by the details of its several items.

BALANCE SHEET, in condensed form followed by the details of its several items.

CASH RECEIPTS AND EXPENDITURES, in summary form, with fund division of expenditures.

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INCOME AND PROFIT AND LOSS ACCOUNT, YEAR ENDING NOVEMBER 30, 1921.

(***See Details of Items Following.***)

Operating Revenues.

I.	Earnings from Sales of Water to Private Consumers,	$479,767.80	
II.	Less Abatements, Refunds, etc.,	586.93	
			$479,180.87
III.	Earnings from Sales of Water to the Municipality:— Earnings based on prescribed rates for water supplied were $71,540.11,—but no payments were made therefor, as per city ordinance,		....
III-A.	Water used by Municipal Water Works and included in its operating expenses,		64.75
	Total Operating Revenues (Water),		$479,245.62

Operating Expenses.

IV.	Source of Supply Expense,	$87,834.99	
V.	Transmission Expense,	9,689.18	
VI.	Distribution Expense,	75,090.91	
VII.	Commercial Expense,	22,652.23	
VIII.	General Expense,	35,412.26	
IX.	Undistributed Expense,	3,686.02	
		$234,365.59	
X.	Depreciation Reserve Charge,	94,511.64	
	Total Operating Expenses,		328,877.23
	Operating Profit,		$150,368.39
XI.	Non-Operating Income (Sundry Sales, not Water),		23,479.02
	Gross Income,		$173,847.41

Deductions from Gross Income.

XII.	Interest on Bonded Debt (net),	56,557.13
	Net Income (carried to Surplus),	$117,290.28

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Revenues.

Earnings from Sales of Water to Private Consumers:—

	Revenue.	Abatements and Refunds.	Net Revenue.
Commercial Consumers (metered),	$390,174.95	$242.33	$389,932.62
Industrial Consumers (metered),	56,515.66	93.20	56,422.46
Institutional Consumers (metered),	5,412.61	224.96	5,187.65
Sales to Contractors (metered),	608.77	.....	608.77
Sales to Contractors (unmetered),	560.19	25.44	534.75
Miscellaneous Consumers (metered),	4.00	.....	4.00
Miscellaneous Consumers (unmetered),	2,765.95	.....	2,765.95
Earnings from within City:—			
(Metered),	$452,715.99	$560.49	$452,155.50
(Unmetered),	3,326.14	25.44	3,300.70
Total,	$456,042.13	$585.93	$455,456.20
Commercial Sales, Little River Transmission Main (metered),	$83.44	.....	$83.44
Commercial Sales, Ludlow (metered),	2,203.84	$1.00	2,202.84
Commercial Sales, Ludlow (unmetered),	150.00	.....	150.00
Commercial Sales, Wilbraham (metered),	1,115.11	.....	1,115.11
Industrial Sales, Ludlow Mfg. Co.'s System (metered),	5,056.29	.....	5,056.29
Wholesale Service, Agawam (metered),	5,702.02	.....	5,702.02
Wholesale Service, Chicopee (metered),	4,879.40	.....	4,879.40
Wholesale Service, East Longmeadow (metered),	1,186.01	.....	1,186.01
Wholesale Service, Longmeadow (metered),	250.00	.....	250.00
Wholesale Service, West Springfield (metered),	3,099.56	.....	3,099.56
Earnings from outside City:—			
(Metered),	$23,575.67	$1.00	$23,574.67
(Unmetered),	150.00	.....	150.00
Total,	$23,725.67	$1.00	$23,724.67
Total Earnings from Sales to Private Consumers, as per Items I. and II.:—			
(Metered),	$476,291.66	$561.49	$475,730.17
(Unmetered),	3,476.14	25.44	3,450.70
Total,	$479,767.80	$586.93	$479,180.87

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Revenues.—Concluded.

Earnings from Sales of Water to City of Springfield:—

Department of Charities (Almshouse and Annexed Buildings) (metered),	$965.50	
Department of Charities (Wayfarers' Lodge) (metered),	11.05	
		$976.55
Drinking Fountains and Tanks (unmetered),		585.00
Fire Department (buildings) (metered),	$245.40	
" " " (unmetered),	271.12	
	$516.52	
" " Municipal Hydrant Service (1973 hydrants,—average during year, at $25 each),	49,325.00	
		49,841.52
Municipal Group (buildings) (metered),	$331.25	
" " (heating plant) (metered),	69.50	
		400.75
Park Department (park purposes) (metered),	$1,663.90	
" " " " (unmetered),	42.00	
" " (fountains, ponds, hose, etc.):—		
(Metered),	107.20	
(Unmetered),	758.00	
Park Department (drinking fountains) (unmetered),	90.00	
" " (public playgrounds) (metered),	8.90	
" " " " (unmetered),	431.00	
		3,101.00
Police Department (buildings) (metered),		143.20
Public Sanitary (metered),		426.20
School Department (buildings) (metered),	$9,641.85	
" " " (unmetered),	691.35	
		10,333.20
Streets and Engineering Department:—		
Building purposes (unmetered),	$405.65	
City yard, Pecousic avenue, east side (unmetered),	86.00	
City yard, Pecousic avenue, west side (unmetered),	30.00	
City yard, Summer street (metered),	605.90	
Emery street work-shop (metered),	31.15	
Sewer flushing (estimated by engineer) (unmetered),	2,000.00	
Snow removal (water from flush gates) (metered),	830.66	
Street sprinkling and washing (unmetered),	1,743.33	
		5,732.69
Total Earnings from Sales to City of Springfield, as per Item III. (unmetered),	$56,565.65	
(metered),	14,974.46	
		$71,540.11

☞ **No payment is made for this amount by the City, as per City ordinance.**

Municipal Water Works (water used at Broadway garage, Colton street property, and No. 32 Birnie avenue,—included in Operating Expenses), as per Item III.-A. (metered),	$64.75

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Expenses.

Source of Supply Expense:—	*Ludlow Supply.*	*Little River Supply.*	*Totals.*
Superintendence,	$1,115.40	$1,258.40	$2,373.80
Operating Labor,	4,220.81	15,687.98	19,908.79
Supplies and Expenses,	1,690.59	4,813.83	6,504.42
Sanitation,	676.55	4,756.63	5,433.18
Purification Labor,	2,621.41	27,205.77	29,827.18
Purification Supplies and Expenses,	168.75	11,551.43	11,720.18
Maintenance of Structures and Equipment,	1,758.76	9,609.75	11,368.51
Maintenance of Purification System,	691.09	7.84	698 93
	$12,943.36	$74,891.63	
Total Source of Supply Expense, as per Item IV.,			$87,834.99

Transmission Expense:—	*Ludlow Supply.*	*Little River Supply.*	*Totals.*
Provin Mountain Reservoir,	....	....	$4,875.64
Operating Labor,	....	$3,668.00	....
Supplies and Expenses,	....	1,207.64	....
Patrolling Transmission Mains,	....	558.70	558.70
Maintenance of Provin Mountain Reservoir, Structures and Equipment,	....	944.83	944.83
Maintenance of Transmission Mains,	....	....	220.21
Ludlow Main No. 1,	$53.65	....	....
Ludlow Main No. 2,	166.56	....	....
Little River Main,	....	2,193.26	2,193.26
Maintenance of Telephone System,	....	896.54	896.54
	$220.21	$9,468.97	
Total Transmission Expense, as per Item V.,			$9,689.18

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Expenses.—Continued.

Distribution Expense:—

Street Division, Operating Labor,	$12,179.39	
Meter and Fittings Division, Operating Labor,	5,291.21	
Street Division, Supplies and Expenses,	1,542.84	
Meter and Fittings Division, Supplies and Expenses,	2,092.85	
Consumers Premises Expenses,	2,740.04	
Maintenance of Mains,	7,043.10	
Maintenance of Gates and Valves,	931.48	
Maintenance of Services,	5,417.59	
Maintenance of Hydrants,	1,149.43	
Maintenance of Meters,	10,843.50	
Maintenance of Distribution System, Buildings, Fixtures and Grounds,	5,304.43	
Maintenance of Foremen's House, 97 Colton St.,	74.56	
Miscellaneous Distribution Expense,	18,921.76	
Maintenance of Equipment,	28.82	
Maintenance of Broadway Garage,	293.87	
Maintenance of No. 32 Birnie Ave.,	53.10	
Lombard Reservoir Draining,	1,071.68	
Electrolysis Survey,	111.26	
Total Distribution Expense, as per Item VI.,		$75,090.91

Commercial Expense:—

Commercial Division, Salaries,	$12,431.35	
Commercial Division, Supplies and Expenses,	860.45	
Reading Meters, Salaries,	5,711.90	
Reading Meters, Supplies and Expenses,	2,409.93	
Undistributable Inspection Expense,	1,238.60	
Total Commercial Expense, as per Item VII.,		$22,652.23

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Expenses.—Continued.

General Expense:—

Salaries of Officers and Assistants,	$17,673.04	
Salaries of General Office Clerks,	10,434.06	
Printing and Stationery,	2,070.54	
Miscellaneous General Office Supplies and Expenses,	5,087.48	
Maintenance of General Office Equipment,	147.14	
Total General Expense, as per Item VIII.,		$35,412.26

Undistributed Expense:—

Injuries and Damages,	$1,011.14	
Utility Equipment Expense, Autos,	11,198.98	
Utility Equipment Expense, Trenching Machine, (*Credit*)	*586.71*	
Utility Equipment Expense, Backfiller,	248.79	
Stock and Stores Expense,	3,853.31	
Suburban Supplies Expense,	154.99	
Miscellaneous Expense,	348.58	
Inventory Adjustments, (*Credit*)	*12,543.06*	
Total Undistributed Expense, as per Item IX.,		$3,686.02

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Expenses.—Continued.

Depreciation Reserve Charge:—

	Total Costs Dec. 1, 1920.	Dep'n Rate.	Depreciation Charge.
BUILDINGS, FIXTURES AND GROUNDS.			
Ludlow Supply:—			
Houses, Barns and Garage at reservoir,....	$2,470.08	1½%	$37.06
Little River Supply:—			
Houses and Garage at Borden Brook Reservoir,.....	8,768.52	1½%	131.52
Distribution:—			
Service Building, Colton Street,.....	94,316.57	2%	1,886.33
Foremen's House, Colton Street,.....	4,920.00	3%	147.60
Garage, Broadway and Wight Place,.....	4,500.00	2½%	112.50
House, Birnie Avenue.....	3,338.00	1½%	50.07
STRUCTURES AND EQUIPMENT.			
Ludlow Supply:—			
Reservoirs, Canals, etc., Ludlow and Belchertown,.....	137,277.21	1%	1,372.77
Standpipe for filtered storage, Ludlow,.....	14,174.30	5%	708.70
Intermittent Filtration Plant, Ludlow,.....	11,352.78	6%	681.16
Transmission Mains, Ludlow to Chicopee River,.....	170,984.90	2%	3,419.69
Little River Supply:—			
Sanitation Structures on Watershed,.....	5,786.85	5%	289.34
Reservoirs, Dams and Tunnel,.....	838,924.60	1%	8,389.25
Sedimentation Basin at West Parish Filters,.	49,575.98	1%	495.76
Purification Plant at West Parish Filters,..	355,201.16	2%	7,104.02
Hoover Coagulant Plant at West Parish Filters,.....	1,515.63	10%	151.56
House for Superintendent at West Parish Filters,.....	7,993.40	1½%	119.90
House for Chemist at West Parish Filters,..	8,130.24	1½%	121.95
House for Foreman at West Parish Filters,.	836.80	2%	16.74
House for Laborers at West Parish Filters,.	500.80	2%	10.02
Barns for Storage at West Parish Filters,...	626.40	2%	12.53
Lighting Equipment at West Parish Filters,.	300.00	5%	15.00
Provin Mountain Reservoir,.....	238,562.53	2%	4,771.25
House at Provin Mountain Reservoir,.....	5,640.49	1½%	84.60
Barns, Garage, etc., at Provin Mountain Reservoir,.....	1,531.92	2%	30.64
Lighting Equipment at Provin Mountain Reservoir,.....	200.00	5%	10.00
Transmission Mains, 54", steel, Diversion Dam to Filters,.....	16,290.97	3%	488.73
Transmission Mains, 42", steel, Filters to Connecticut River,.....	480,044.62	3%	14,401.33
Transmission Mains, 30", steel, (2) Crossing Connecticut River,.....	106,012.39	2%	2,120.25

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Operating Expenses.—Concluded.

Depreciation Reserve Charge—Concluded:—

	Total Costs Dec. 1, 1920.	Dep'n Rate.	Depreciation Charge.
STRUCTURES AND EQUIPMENT.—Concluded.			
Little River Supply.—Concluded.			
Transmission Mains, 42", cast-iron, Orchard Street, City,	$32,757.12	2%	$655.14
Fences, etc., Connecticut River Crossing,	250.00	3%	7.50
Telephone System, Borden Brook to Provin Mountain,	3,183.31	5%	159.16
Distribution:—			
Supply Main, 24", cement-lined, Ludlow No. 1,	9,018.32	2%	180.36
Supply Main, 30", cast-iron, Ludlow No. 2,	102,953.18	2%	2,059.06
Circuit Mains, 24", 30", 36", cast-iron,	378,952.38	2%	7,579.05
Distribution Mains, 1" to 2" (inclusive), wrought-iron,	5,029.26	3%	150.88
Distribution Mains, 4" to 24" (inclusive), cast-iron,	1,245,200.92	2%	24,904.02
Services installed (water works' cost),	457.80	5%	22.89
Meters installed (water works' cost),	6,738.63	4%	269.55
Hydrants installed (water works' cost),	161,467.49	3%	4,844.02
General Office Equipment (Furniture and Fixtures),	6,625.67	5%	331.28
Stores Equipment, Colton Street Yard,	23,235.06	1%	232.35
Shop Equipment and Tools (not hand), Colton Street,	24,973.90	10%	2,497.39
Utility Equipment, Teams (all),	2,502.72	15%	375.40
Utility Equipment, Automobiles (all),	12,253.29	25%	3,063.32
	$4,585,376.19		
Total Depreciation Reserve Charge, as per Item X.,			$94,511.64

Non-Operating Income:—

Sale of Products, etc.,	$20,705.27
Rent from Land, Buildings, etc.,	2,773.75
Total Non-Operating Income, as per Item XI.,	$23,479.02

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DETAILS OF ITEMS IN PROFIT AND LOSS ACCOUNT.—1921.

Deductions from Gross Income.

Interest on Bonded Debt:—		
On $150,000 Ludlow Supply 4 per cent Bonds, 12 months,	$6,000.00	
Total, account Ludlow Supply Sinking Fund Bonds,		$6,000.00
On $330,000 Little River Supply 4 per cent Bonds, 1 month,	$1,100.00	
On $310,000 Little River Supply 4 per cent Bonds, 11 months,	11,366.67	
On $986,000 Little River Supply 3½ per cent Bonds, 1 month,	2,875.83	
On $932,000 Little River Supply 3½ per cent Bonds, 11 months,	29,901.67	
On $180,000 Little River Supply 4¼ per cent Bonds, 11 months,	7,012.50	
On $170,000 Little River Supply 4¼ per cent Bonds, 1 month,	602.08	
On $80,000 Little River Supply 3½ per cent Bonds, 11 months,	2,566.67	
On $75,000 Little River Supply 3½ per cent Bonds, 1 month,	218.75	
Total, account Little River Supply Serial Bonds,		55,644.17
Total Bond Interest Accruing in 1921,		$61,644.17
Less Interest Received on Sinking Fund (account Ludlow Supply Bonds),		5,087.04
Total Net Interest on Bonded Debt Deducted from Gross Income, as per Item XII.,		$56,557.13

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BALANCE SHEET.—NOVEMBER 30, 1921.

(See Details of Items Following.)

Assets.

XIII.	Plant, Property and Equipment, November 30, 1920,	$5,505,736.67	
	Less Sundry Changes during 1921,	112.38	
		$5,505,624.29	
XIII.-A.	Additions to Plant, Property and Equipment since November 30, 1920,	162,606.75	
	Total Plant, Property and Equipment, November 30, 1921,		$5,668,231.04
XIV.	Stock and Stores (per inventories),		159,703.32
XV.	Accounts Receivable,		78,021.50
XVI.	City Treasurer, Reserve Funds for Deferred Work,		34,774.80
XVII.	Sinking Fund (for Ludlow Bonds due in 1923),		133,066.69
	Total Assets,		$6,073,797.35

Liabilities.

XVIII.	Bonded Debt,	$1,637,000.00
XIX.	City of Springfield Equity,	3,809,063.35
XX.	Current Liabilities,	.....
XXI.	Accrued Interest,	20,579.17
XXII.	Depreciation Reserve,	260,138.37
XXIII.	Reserves for Deferred Work,	34,774.80
XXIV.	Surplus (unappropriated),	312,241.66
	Total Liabilities,	$6,073,797.35

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Assets.

Plant, Property and Equipment, November 30, 1920 (less changes in same during 1921):—

TANGIBLE ASSETS.

LAND AND EASEMENTS.		
Ludlow Supply.		
Land (for reservoirs, canals, etc.),	$71,022.84	
Easements (for canals, mains, etc.),	15,736.29	
Little River Supply.		
Land (for reservoirs, filters, mains, etc.),	225,298.91	
Easements (for pipe line to city),	20,862.64	
Distribution.		
Land (twelve parcels) in city,	78,034.55	
		$410,955.23
BUILDINGS, FIXTURES AND GROUNDS.		
Ludlow Supply.		
Houses, Barns and Garage, at reservoir,	$2,470.08	
Forestation (watershed),	155.01	
Little River Supply.		
Houses and Garage, at Borden Brook Reservoir, etc.,	8,768.52	
Forestation (watershed),	4,039.20	
Distribution.		
Service Station, Colton Street,	94,316.57	
Foremen's House, Colton Street,	4,920.00	
Garage, Broadway and Wight Place,	4,500.00	
House, Birnie Avenue,	3,338.00	
		122,507.38
STRUCTURES AND EQUIPMENT.		
Ludlow Supply.		
Reservoirs, Canals, etc., Ludlow and Belchertown,	$137,277.21	
Standpipe for filtered storage, Ludlow,	14,174.30	
Intermittent Filtration Plant, Ludlow,	11,352.78	
Transmission Mains, Ludlow Reservoir to Chicopee River,	170,984.90	
Little River Supply.		
Sanitation Structures (on watershed, etc.),	5,786.85	
Reservoirs, Dams and Tunnel,	838,924.60	
Sedimentation Basin, at West Parish Filters,	49,575.98	
Purification Plant, at West Parish Filters,	355,201.16	
Hoover System Coagulant Plant, at West Parish Filters,	1,515.63	
Amounts forward,	$1,584,793.41	$533,462.61

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Assets.—Continued.

Plant, Property and Equipment, November 30, 1920 (less changes in same during 1921)—Continued:—

TANGIBLE ASSETS.—Continued.		
Amount forward,		$533,462.61
STRUCTURES AND EQUIPMENT.—Continued.		
Amount forward,	$1,584,798.41	
Little River Supply.—Continued.		
House for Superintendent, at West Parish Filters,	7,993.40	
House for Chemist, at West Parish Filters,	8,130.24	
House for Foreman, at West Parish Filters,	836.80	
House for Laborers, at West Parish Filters,	500.80	
Barns for Storage, at West Parish Filters,	626.40	
Lighting Equipment, at West Parish Filters,	300.00	
Provin Mountain Reservoir,	238,562.53	
House for Caretaker, at Provin Mountain Reservoir,	5,640.49	
Barns, Garage, etc., at Provin Mountain Reservoir,	1,531.92	
Lighting Equipment, at Provin Mountain Reservoir,	200.00	
Forestation, at Provin Mountain Reservoir,	54.01	
Transmission Mains, 54", steel, diversion dam to filters,	16,290.97	
Transmission Mains, 42", steel, filters to Connecticut River,	480,044.62	
Transmission Mains, 30", steel, (2) crossing Connecticut River,	106,012.39	
Transmission Mains, 42", cast-iron, Orchard Street line, City,	32,757.12	
Fences, etc., Connecticut River crossing,	250.00	
Telephone System, Borden Brook Reservoir to Provin Mountain,	3,183.31	
Distribution.		
Supply Main, 24", cement-lined, Ludlow No. 1,	9,018.32	
Supply Main, 30", cast-iron, Ludlow No. 2,	102,953.18	
Circuit Mains, 24", 30", 36", cast-iron,	378,952.38	
Distribution Mains, 1" to 2" (inclusive), wrought-iron,	5,029.26	
Distribution Mains, 4" to 24" (inclusive), cast-iron,	1,245,200.92	
Services installed (at water works' cost),	457.80	
Meters installed (at water works' cost),	6,738.63	
Hydrants installed (at water works' cost),	161,467.49	
Amounts forward,	$4,397,526.39	$533,462.61

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Assets.—Continued.

Plant, Property and Equipment, November 30, 1920 (less changes in same during 1921)—Concluded:—

TANGIBLE ASSETS.—Concluded.		
Amount forward,		$533,462.61
STRUCTURES AND EQUIPMENT.—Concluded.		
Amount forward,	$4,397,526.39	
Distribution.—Concluded.		
General Office Equipment (furniture and fixtures),	6,625.67	
Stores Equipment, Colton Street Service Station,	23,235.06	
Shop Equipment and Tools (not hand), Colton Street,	24,973.90	
Utility Equipment, Automobiles (all),	12,253.29	
Utility Equipment, Teams (all),	2,502.72	
		4,467,117.03
Total Tangible Assets,		$5,000,579.64
INTANGIBLE ASSETS.		
MISCELLANEOUS CONSTRUCTION AND EQUIPMENT COSTS. (*Not includible elsewhere.*)		
Franchise Cost, 1872 (from Springfield Aqueduct Co.—estimated value of balance left),	$75,000.00	
Swift River Possible Supply (plans and study costs of 1899-1902),	253.61	
Westfield River Possible Supply (plans and study costs of 1899-1906),	16,565.68	
Ludlow Experimental Filtration (plans and tests of 1900-1905),	18,299.29	
Water Rights and Power Diversion:—		
Ludlow Supply, $112,532.47		
Little River Supply, 282,505.98		
	395,038.45	
Total Intangible Assets,		505,157.03
Total Plant, Property and Equipment, November 30, 1920,		$5,505,736.67
Less sundry sales and transfers of same during 1921,		112.38
Total Plant, Property and Equipment, as per Item XIII.,		$5,505,624.29

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Assets.—Continued.

Additions to Plant, Property and Equipment since November 30, 1920:—

LAND AND EASEMENTS.		
Ludlow Supply.		
Labor on land account,		$16.44
Little River Supply.		
Land survey, labor and expense,	$386.73	
Land purchased, Dudley lot,	47.31	
Land legal expense of prior years,	125.00	
		559.04
Distribution.		
Land purchased, Colton Street, for future needs of service station,		15,146.10
BUILDINGS, FIXTURES AND GROUNDS.		
Ludlow Supply.		
Forestation (watershed),	$339.47	
Buildings at reservoir, tank pressure system,	876.53	
Fence cost, at reservoir property,	13.20	
Sanitation cost, at reservoir property,	62.54	
		1,291.74
Little River Supply.		
Forestation (watershed),		1,815.85
STRUCTURES AND EQUIPMENT.		
Little River Supply.		
Purification Plant, at West Parish Filters:—		
Experimental filters, $68.73		
New pump house, 796.53		
New coagulant line, 217.45		
	$1,082.71	
House for Chemist, at filters (completion),	1,228.66	
Garage at Provin Mountain Reservoir (labor),	26.40	
		2,337.77
Distribution.		
Distribution Mains (including gates), 4" to 24", cast-iron,	$118,043.07	
Distribution Mains, 1" to 2", wrought-iron,	313.63	
Hydrants installed (at water works' cost),	12,728.43	
General Office Equipment (furniture and fixtures),	696.81	
Stores Equipment, Colton Street,	1,154.59	
Shop Equipment and Tools (not hand), Colton Street,	801.83	
Utility Equipment, automobiles,	7,701.45	
		141,439.81
Total Additions to Plant, Property and Equipment, 1921, as per Item XIII.-A.,		$162,606.75

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Assets.—Continued.

Stock and Stores (as per Inventory):—			
Cast-iron Pipe Stock,		$106,529.74	
Wrought-iron Pipe Stock,		11,161.74	
Meter Stock,		12,072.72	
Stores and Supplies,		1,441.41	
Small Tools Stock,		10,381.45	
Engineers' Supplies,		595.89	
Filter Supplies (Ludlow),		884.19	
		$143,067.14	
Little River Operating Supplies:—			
At Borden Brook Reservoir,	$6,006.85		
At North Blandford,	353.20		
At West Parish Filters,	4,594.40		
At West Parish Filters (laboratory),	5,424.08		
At Provin Mountain Reservoir,	166.70		
On 42" Pipe Line,	90.95		
		16,636.18	
Total Stock and Stores, as per Item XIV.,			$159,703.32
Accounts Receivable:—			
Consumers' Accounts Committed to City Collector —Balance Uncollected November 30, 1920,		$77,190.17	
Committed to City Collector during Present Year,		556,846.02	
			$634,036.19
Collected by City Collector and Paid to Treasurer during Present Year,		$556,488.13	
Abated to City Collector during Present Year,		1,949.86	
			558,437.99
Consumers' Accounts Committed to City Collector,—Balance Uncollected November 30, 1921 (includes December 1, 1921, commitment),			$75,598.20
Consumers' Accounts not yet Committed to City Collector,—Miscellaneous Sales Charges, etc.,			2,423.30
Total Accounts Receivable, as per Item XV.,			$78,021.50

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Assets.—Concluded.

City Treasurer (see Cash Summary):—		
Cash in hands of City Treasurer,—Revenues (balance transferred to Sinking Fund),	.....	
Cash in hands of City Treasurer,—Reserve Fund for Deferred Work,	$34,774.80	
Total City Treasurer, as per Item XVI.,		$34,774.80
Sinking Fund (Account Ludlow Supply Bonded Debt):—		
Balance in hands of Sinking Fund Commissioners, November 17, 1920 (per their report),	$107,601.16	
Net surplus transferred from Water Works cash revenue of 1920,	14,378.49	
Total fund at beginning of year 1921,	$121,979.65	
Interest earnings and additions credited by Sinking Fund Commissioners during 1921 (net),	5,087.04	
Balance in hands of Sinking Fund Commissioners, November 17, 1921 (per their report),		$127,066.69
Net surplus from Water Works cash revenue of 1921,		6,000.00
Total Sinking Fund November 30, 1921, as per Item XVII.,		$133,066.69

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Liabilities.

Bonded Debt:—

	Outstanding Nov. 30, 1920.	Paid During Present Year.	Outstanding Nov. 30, 1921.
Ludlow Supply 4 per cent Sinking Fund Bonds due October 1, 1923,	$150,000.00	.....	$150,000.00
Little River Supply 4 per cent Serial Bonds (Act of 1906,—issued 1907 and 1908), $20,000 due January 1, annually,	330,000.00	$20,000.00	310,000.00
Little River Supply 3½ per cent Serial Bonds (Act of 1906,—issued 1909 and 1910), $54,000 due January 1, annually,	986,000.00	54,000.00	932,000.00
Little River Supply 4¼ per cent Serial Bonds (Act of 1913,—issued 1913) $10,000 due November 1, annually,	180,000.00	10,000.00	170,000.00
Little River Supply 3½ per cent Serial Bonds (Act of 1913,—issued 1916) $5,000 due November 1, annually,	80,000.00	5,000.00	75,000.00
	$1,726,000.00	$89,000.00	

Total Bonded Debt, as per Item XVIII., ... $1,637,000.00

City of Springfield Equity:—

Balance November 30, 1920,	$3,931,060.18	
Less Amount of Plant Cost abandoned by 1919 Appraisal, wrongly deducted from Surplus Account (unappropriated) and chargeable to this account (adjustment of transfer in 1920 accounts),	373,491.20	
Corrected Balance November 30, 1920,		$3,557,568.98
Added during present year for Construction paid from Revenue,	$162,606.75	
Less sundry sales account plant and property of prior years,	112.38	
Net amount added for Construction paid from revenue,		162,494.37
Added during present year for Bonds paid from revenue,		89,000.00
Total of City of Springfield Equity, as per Item XIX.,		$3,809,063.35

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Liabilities.—Continued.

Current Liabilities:—

Total Current Liabilities, as per Item XX.,		.....

Accrued Interest:—

Accrued Interest on Ludlow Supply Bonds,	$1,000.00	
Accrued Interest on Little River Supply Bonds,	19,579.17	
Total Accrued Interest, as per Item XXI.,		$20,579.17

Depreciation Reserve:—

Balance November 30, 1920,	$180,344.55	
Amount credited to reserve in 1921 and charged to Operating Expenses under "Depreciation Reserve Charge" (per charge schedule, pages 19 and 20),	94,511.64	
		$274,856.19
Less Cost of Distribution System Renewals charged to above reserve account in 1921, as follows:—		
Distribution Mains renewals,	$2,914.24	
Gates and Hydrants renewals,	3,544.22	
Replacement work on account of new Connecticut River Bridge approaches,	8,259.36	
		14,717.82
Total Depreciation Reserve, as per Item XXII.,		$260,138.37

Reserves for Deferred Work, etc.:—

Balance November 30, 1920,	$20,000.00
Amount set aside from current revenues of 1921,	14,774.80
Total Reserves for Deferred Work, etc., as per Item XXIII.,	$34,774.80

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DETAILS OF BALANCE SHEET ITEMS, NOVEMBER 30, 1921.

Liabilities.—Concluded.

Surplus Account (unappropriated):—

Balance November 30, 1920,		$80,991.10	
Plus amount of Plant Cost Abandoned by 1919 Appraisal, wrongly deducted from this account and chargeable to City of Springfield Equity (adjustment of transfer in 1920 account),		373,491.20	
Corrected Balance November 30, 1920,		$454,482.30	
Net Income for 1921 from Profit and Loss Account,		117,290.28	
Transfer of Reserve for Lombard Reservoir Lot Improvement (fund used in 1921),		691.00	
Delayed Gains in Prior Periods,		6,944.63	
			$579,408.21
Delayed Losses in Prior Periods (charged off in 1921),		$897.38	
Transfer to City of Springfield Equity Account for new Construction paid from Revenue,	$162,606.75		
Less sundry sales account plant and property of prior years,	112.38		
		162,494.37	
Transfer to City of Springfield Equity Account for Bonds paid from Revenue,		89,000.00	
Transfer to Reserve for Deferred Work of amount set aside in 1921 for this purpose,		14,774.80	
			267,166.55
Total Surplus Account (unappropriated), as per Item XXIV.,			$312,241.66

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CASH SUMMARY.—1921.

Items.	Water Works Revenue.	Reserve Fund for Deferred Work.	Lombard Reservoir Lot Fund.	Totals.
Receipts—1921.				
Collections Paid to City Treasurer by City Collector:—				
For Water Accounts,	$474,946.02	.....	.....	$556,488.13
For Misc. Sales Accounts,	81,542.11			
For Refunds to City Treasurer,	461.35	.....	.....	461.35
Total Receipts, 1921,	$556,949.48	.....	.....	$556,949.48
Less Transfers to Reserves,	−14,774.80	+$14,774.80	.....	.....
Balances in hands of City Treasurer, Nov. 30, 1920,	.....	20,000.00	$691.00	20,691.00
Total Receipts and Balances, 1921,	$542,174.68	$34,774.80	$691.00	$577,640.48
Expenditures—1921.				
Bills Approved and Paid,	$154,552.01	.....	.....	$385,050.68
Pay Rolls Approved and Paid,	230,498.67			
Interest Paid on Ludlow Bonds,	6,000.00	.....	.....	151,815.00
Interest Paid on Little River Bonds,	56,815.00			
Little River Serial Bonds Paid,	89,000.00			
Amount for Sinking Fund (for account of Ludlow Supply Bonds),	6,000.00	.....	.....	6,000.00
Total Expenditures, 1921,	$542,865.68	.....	.....	$542,865.68
Less amount paid from Reserves,	−691.00	.....	+$691.00	.....
Balance in hands of City Treasurer, Nov. 30, 1921,	.....	$34,774.80	.....	34,774.80
Total Expenditures and Balances, 1921 (to agree with receipts),	$542,174.68	$34,774.80	$691.00	$577,640.48

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DIVISION OF CASH EXPENDITURES.—1921.

Operating Expenses:—		
Total charges during year,	$234,365.59	
Less amounts not cash cost of year (including stock used, overheads, etc.),	48,230.93	$186,134.66
Construction Costs:—		
Total charges during year,	$162,606.75	
Less amounts not cash cost of year (including stock used, overheads, etc.),	38,900.23	123,706.52
Renewal and Replacement Costs:—		
Total charges during year,	$14,717.82	
Less amounts not cash cost of year (including stock used, overheads, etc.),	2,882.73	11,835.09
Cost of Sales Charges:—		
Total charges during year (for services, meters, repairs, etc.) to consumers,	$79,613.18	
Less amounts not cash cost of year (including stock used, overheads, rentals, etc.),	16,488.77	63,124.41
Treasurer's Advance for 1921 petty cash expenses,		250.00
Total Approved Bills and Pay Rolls Paid,		$385,050.68
Interest Payments (account bonded debt),	$62,815.00	
Bond Payments (account bonded debt),	89,000.00	
Sinking Fund Payments (account bonded debt),	6,000.00	
Total Bonded Debt Requirements,		157,815.00
Total Cash Expenditures, 1921,		$542,865.68
Transferred to Reserve Fund for Deferred Work,		14,774.80
Total Cash Payments and Reserve Fund,		$557,640.48

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APPENDICES.—1921.

Tabulations and statistics, including a summary in form recommended by the New England Water Works Association, will be found in the appendices to this report.

Respectfully submitted,

ALFRED R. HATHAWAY,
Water Registrar.

BOARD OF WATER COMMISSIONERS, December 29, 1921.

Accepted and ordered made a part of the report of the Board to the City Council.

A. R. HATHAWAY, *Clerk.*

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SUPERINTENDENT'S REPORT

DECEMBER 29, 1921.

To the Board of Water Commissioners of the City of Springfield, Mass.

GENTLEMEN:—I herewith submit the forty-eighth annual report of the Superintendent, being for the year ending November 30, 1921.

The amount of pipe laid, the number of gates and fire hydrants set, the amount of pipe discontinued, and the number of gates and fire hydrants taken out, are shown as follows:—

MAIN PIPE, GATES AND HYDRANTS ADDED—1921.

NUMBER.	Extensions.	Renewals.	Private.	TOTALS.
Feet of pipe laid, 1921,.....	31,744	1,185	9,965	42,894
Added,—account of previous years,.....	0	0	446	446
Total pipe added, 1921,..	31,744	1,185	10,411	43,340
Gates set, 1921,.....	229	28	42	299
Added,—account of previous years,.....	0	0	1	1
Total gates added, 1921,..	229	28	43	300
Fire hydrants set, 1921,....	58	50	0	108
Added,—account of previous years,.....	0	0	0	0
Total fire hydrants added, 1921,.....	58	50	0	108

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MAIN PIPE, GATES AND HYDRANTS TAKEN OUT OR ABANDONED—1921.

Number.	Totals.
Feet of pipe,	6,206
Gates,	53
Fire hydrants,	54

There are now in use 243.65 + miles of supply and distribution mains, a net addition of 7.03 + miles the past season.

We have laid 31,744 feet of extension main pipe at a cost of $117,838.42, including gates and connections for same.

Our pipe trenching machine still continues to prove its usefulness and value. With it we have been enabled to keep our pipe laying gang reduced to its very lowest terms and yet keep our extension and pipe laying work up to date, and twice as much work or even more could be performed if occasion required. It has never yet been worked to its limit.

Considerable distribution improvement work was done in the early part of the year, viz., December and January, and the following comprises the principal part of it:—

In Sumner avenue from Daviston street to Brooklyn avenue 485 feet of 16″ pipe were laid; in Brooklyn avenue from Sumner avenue to Blaine street 1,906 feet of 12″ pipe; and in Blaine street from Brooklyn avenue west, connecting with the 8″ pipe near Sunapee street, 143 feet of 12″ pipe were laid, and this improvement equalized and steadied the pressure for the East Longmeadow supply very materially. At some future date a 12″ pipe should be laid in Audubon street from Blaine to White street for the benefit of the lower end of the White street district, and still further reinforcing the East Longmeadow supply.

A 10″ main was also laid in Fountain place and Fairview street, 1,684 feet in length, completing a connection between Belmont avenue and Commonwealth avenue for the improvement of the system south of Belmont avenue in the Franconia region so-called.

Early in the summer the 16″ main was continued eastward in Sumner avenue about 1,900 feet from Brooklyn avenue to Eloise street, and all side streets between were connected, thus improving the pressure and supply in Paridon street where the Diamond Match Company is located.

Another 16″ extension was laid later in Pasco street, Indian Orchard,

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on the guarantee petition of the Chapman Realty Trust, it also being a portion of a projected improvement connecting the 16″ main in Boston road through Pasco street to Old Bay road, and thence in the same to Pine street, Indian Orchard, near the works of the Chapman Valve Company's plant.

Perhaps the most important work of the year, and certainly the most troublesome, was the taking up and relaying of the 36″ main in Water street between Bridge and Court streets on account of the approaches to the new Connecticut River bridge. The pipe was taken out in the month of May and relaid in August, after the street had been relaid nearly to its new grade; some 936 feet of 36″ main pipe being thus taken out and relaid, at a total cost of $8,259.36, including the installation of two 24″ gates in the main line, one just north of Bridge street and one just south of Court street.

After the street had been raised to its subgrade, a 10″ main was laid parallel to the 36″ nearer to the easterly sidewalk between Court and Bridge streets, connecting to the mains in each of those streets, thus giving us an independent line for carrying hydrants, also service connections, and avoiding the use of the 36″ main for other purposes than as a conduit trunk line. About 1,053 feet of this pipe were laid at a cost of $4,172.91.

The largest extension work outside of the above has been the laying of about 3,400 feet of 8″ main pipe in Denver street to and across the north branch of Mill River into and through Delmore street so-called to Wilbraham road, thence west in Wilbraham road about 1,117 feet of 16″ pipe, all of which were laid on a guarantee petition.

Besides the above, extensions have been laid in sixty-six other streets, varying in length from 23 feet to 1,600 feet, and in size from 1″ to 16″ in diameter, the details of all of which will appear in tables in the appendix to this report.

We also lowered about 200 feet of 30″ pipe in Carew street just west of St. James avenue, where the street was straightened and regraded.

Electric pipe thawing machine No. 2 was completed and ready for use in December, 1920, but neither of them was called into use, as we had no service pipes frozen during the winter. We are equipped, however, with two powerful machines, and unless a very large epidemic of frozen services occurs, ought to be able to keep ahead of the game or at least be very little behind it.

One hundred eight hydrants have been installed, of which number 58 are additional and 50 renewals.

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Two hundred ninety-nine gates have been set, of which number 271 are additional and 28 renewals.

Five hundred six new taps for service pipes have been made, and 72 have been replaced, making a total of 578; 105 old ones have been abandoned and cut off, leaving a net total increase of 401 for the year. This, plus last year's total of 16,328, makes the number of service pipes now connected to the system 16,729.

This is the first full year of the use of our pipe cleaning instrument, and it has proved to be a very popular as well as money saving appliance. The average cost of cleaning a 50′ service is between $3 and $5, and it saves anywhere from $40 to $80 each time it is successfully used, and I have yet to hear of a failure. If the pipe is straight, there is absolutely no trouble, but if it changes its direction, the pipe sometimes must be uncovered at the bend, as the tool will not work in a crooked pipe. Very few such services are found, however, and we have cleaned not less than 500 during the year, at an approximate saving to the owners of $25,000, besides saving the cost of opening and repairing many paved streets.

There have been 86 leaks in service pipes, a decrease of 6 over the previous year. These leaks are generally of a minor nature but require immediate attention.

There have been 32 leaks in main pipes during the year, an average of .13+ per mile of main pipe in use. The following table shows the sizes of pipe in which these leaks occurred:—

Kind and Size of Pipe	1¼″	2″	6″	8″	10″	12″	16″	20″	24″	30″	36″	42″	Totals.
Wrought-iron,.....	1	2	..	..	..	..	..	..	..	..	..	..	3
Cast-iron,.....	..	..	9	1	1	4	2	1	..	5	2	1	26
Cement-lined,.....	..	..	..	..	..	..	..	..	3	..	..	..	3
Total leaks,.....	1	2	9	1	1	4	2	1	3	5	2	1	32

Twenty-one of these leaks were at defective joints; 1 was in a Smith sleeve; 3 were from cracked pipe; 1 was the blowing out of a 4″ plug; 2 were caused by electrolysis; 1 was the blowing out of the whole side of a 16″ main, and 3 were of lesser importance. The total cost of repairing the above leaks, not including the leak in Ludlow Main No. 2, which occurred too late for the total cost to be included in this year's account, was $3,290.57.

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The largest leak in the city limits in the distribution system was the breaking of the 16" main in Mill street at the junction of Locust, on August 25, where a piece of pipe five feet long and half the width of the pipe blew out of one side, and caused much damage to the street but fortunately did not flood any private property. The break was directly under the junction of the street railway tracks where they branch from Locust street into Fort Pleasant avenue, Belmont avenue, and Locust street extension, and thus was exceedingly difficult to get at to repair. The tracks and street surface were lifted for quite a distance down the street, and it was several days before the repairs were wholly completed. The cost amounted to $469.77.

On November 8, a break occurred in the 36" Ludlow Main No. 2, about halfway between North Wilbraham road and Ludlow reservoir. It proved to be a crack extending the whole length of one pipe on its lower side, about twelve feet long, and was repaired by acetylene welding, the pipe having been turned over so as to bring the crack on top. It is the first and only job of its kind in the system. The work was all done under the direct supervision of Mr. E. E. Lochridge, chief engineer. The cost of repairs cannot be included in this year's report, the leak occurring too late in the season.

Hydrants have suffered less severely this year than during the previous year from breaking by automobiles, only 17 having been broken against 29 during 1920. Of these we have collected the cost of repairs from eight, five have not been paid yet, and four are charged to maintenance, not having been able to ascertain by whom they were broken.

Hydrants have been regularly inspected as usual and kept in working condition.

The gate system has been inspected and gates operated, besides keeping up with the street department work where gate boxes had to be raised or replaced in connection with new paving.

The work of inspecting and relocating stop boxes and service pipes is progressing steadily by the gate inspection gang, and upwards of 1,900 have been thus inspected and sketches made.

Our service building and real estate connected therewith have been kept up as usual. In March of the present year a ten thousand gallon gasoline tank was purchased and installed underground in the yard south of the service building on Colton street, in order to obtain whatever benefits might be derived from the purchase of gasoline in carload lots. The total cost of installing this tank was $1,154.59, and a net saving of from seven to nine cents per gallon on the cost of gasoline was effected. Something like eighteen thousand gallons of gasoline have been pur-

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chased since the tank was installed, and, figuring roughly, the net saving so far has been about $1,500, which is upwards of $300 in excess of the cost of the tank.

Meter work has been carried on as usual, caring for, testing and repairing all that have needed it, and setting new ones in all newly built houses, blocks, and manufactories. Approximately 4,550 meters have been repaired and 537 new ones set, making a total of about 5,087 meters handled during the year. A determined effort was made during this year to complete the setting of detector meters on all fire pipes, which work has been under way for the last five or six years. Thirty-seven meters have been set during the year, and there still remain about ten more to be set. Of these last most of them have been held over by request of the property owners on account of lack of funds to finance the proposition, but all of this is with the understanding that the meters shall be installed during the coming year.

STATISTICS.

In the appendices to this report will be found tables showing the pipe laid, gates and hydrants set, pipe, gates, and hydrants taken out, etc.

Respectfully submitted,

ALFRED E. MARTIN,
Superintendent.

BOARD OF WATER COMMISSIONERS, December 29, 1921.

Accepted and ordered made a part of the report of the Board to the City Council.

A. R. HATHAWAY, *Clerk.*

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OBITUARY.

On October 24, 1921, foreman Fred O. Hancock of this department passed away. Mr. Hancock was a son of former superintendent Joseph C. Hancock, and had spent practically all of his working years in the employ of the Springfield Water Works, having started on the works June 14, 1887, as water boy, and worked through the several grades of laborer up to the position of foreman, which title he was given on June 6, 1904, although he had been acting as foreman for several years previous to that date. His final illness was of short duration, continuing only one week, though he had been in failing health for the last two or three years. His death, however, was sudden and unexpected at the last, and a severe shock to his friends and associates in the department. He was of a cheerful and optimistic disposition, and it is needless to say will be much missed by his many friends and associates in and of the Springfield Municipal Water Works.

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CHIEF ENGINEER'S REPORT

DECEMBER 29, 1921.

Board of Water Commissioners, Springfield, Mass.

GENTLEMEN:—A year of relative inactivity in business has resulted in a decreased demand for water. This has enabled us to remain within the bounds of our developed capacity, and delayed for another year, at least, the necessity for additional and expensive construction in the expansion of the Little River system, the probable need for which has been called to your attention for several years. For some years preceding 1918, when the amount used established a record, each year's use materially exceeded that of the previous year. With a resumption of an annual increase it will be expedient to plan additional construction; but until this time the demands for water can be adequately met with our present development, and the raising of funds necessary for such expansion to plant and equipment may well be delayed.

The average daily amount of water used during 1921 was 12,870,000 gallons, as compared with 12,930,000 gallons in 1920. This is a decrease of 60,000 gallons per day from the amount used in 1920, and is 450,000 gallons per day less than the record of 1918.

The season has been a severe one for any water supply that was not well reinforced with stored water. The dry weather, which had so noticeable an effect on the fruit and other crops in this vicinity, came on early, making it necessary to draw water for the first time from Borden Brook reservoir on May 31, two months earlier than the previous year. On November 19, when the gate was closed, the reservoir had been drawn down 22.9 feet below the overflow, or to an elevation of 1,047.1, leaving in storage 1,085 million gallons of the 2,500 million available when the reservoir is full.

Continuing the policy of recent years, white pine trees have been planted on available land; 50,000 on the Little River watershed, and 15,000 near the Ludlow reservoir.

In order to make certain that our plantings were not being permanently injured or lost by the ravages of such pests as the weevil, blister rust, etc., a man trained in forestry care was secured to go over them thoroughly. His work covered the entire summer, but it was well worth the effort. Affected trees have been pruned and all are now apparently in excellent condition. Work has also been planned in conjunction with

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Federal and State authorities for the suppression of the white pine blister rust, which has not appeared on our tracts except in limited areas.

In accordance with a recent ruling of the State Department of Public Health, the issuing of permits for boating or fishing on reservoirs was discontinued at the beginning of the year.

Electrolysis conditions have resulted in two serious impairments to the service; one in the cast-iron line at Main and William streets, where an electrolysis weakened pipe broke, flooding the vicinity, and the other on the 42″ steel main in West Springfield, where a hole had been eaten through the steel plate due to the breaking of the insulation provided to protect the pipe, thus permitting a flow of electricity to a six inch service pipe of the West Springfield system where it crosses directly over our line. This is the first leak that has occurred due to electrolysis on this steel main in its 12 years of continuous service. Repair was made without interruption of service.

Another break of consequence was the development of a crack, or split, twelve feet in length on the 36″ cast-iron main about a mile below Ludlow reservoir. Over a hundred feet of farm road was entirely destroyed, but the damage done was not so serious as usually results from a break in a pipe of this size owing to its remote location; nevertheless, a considerable flood resulted, which, differently located, would have been very troublesome. The break was repaired by oxy-acetylene welding.

Three claims for damage from water leaks aggregating $190 have been settled during the year.

Two lots in Colton street, adjacent to the service station, have been purchased, making possible the extension of yards 130 feet northerly, and providing additional street and railroad frontage. The only addition to watershed property is a tract of ten acres in North Blandford which was secured by tax deed.

Underground tanks for the storage of gasoline have been installed at the service station in Colton street with a capacity of 10,000 gallons, and at the West Parish filters with a capacity of 550 gallons.

A considerable portion of the fence, some 3½ miles in length on the border road around the Borden Brook reservoir, built in 1909, was replaced during the year, and the work will be completed in the coming spring. The material used in this construction was obtained wholly from blight affected chestnut trees on the watershed which were cut, sawed, and planed on the lot.

The work of regrading the streets which are to become approaches for the new Connecticut River bridge, necessitating the removal and relaying of the 36″ main through Water street as well as the mains in all

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of the affected streets, and the temporary discontinuing of all water service in this section, has progressed during the year, and the work of replacing has been completed as far as the streets have been put in condition. Some additional work will be needed to complete the renewals with the finishing of the approaches in the spring, but by far the largest portion of the work is done. A location between two of the longitudinal arches on the bridge has been provided and reserved for a large pipe line across the river, and when the necessity comes for a new main, this location will be readily available.

The old Lombard reservoir, long since discontinued as a source of water supply, but never completely drained, had become a nuisance due to its use without supervision, for bathing, skating, etc., and, following the accidental drowning of a young boy, it was decided that the reservoir should be emptied. The long time which had elapsed since gates, drains, or any of the appurtenances to the reservoir had been used, had created a situation which made it very difficult to get rid of the water. The task was accomplished, however, early in the summer.

A number of misfortunes have attended the operation of the works this year. The breaks in large pipes, the troubles from electrolysis, the low rainfall with its attendant depletion of the reservoir, have been referred to; this dryness also seriously affected the recent plantings of pine trees, so that a considerable number of them will be lost. The ice storm of November 27 destroyed many of our larger trees and several miles of the private telephone line, completely cutting off all communication between points on the watershed, filters, and reservoirs.

The use of water from the mains for flushing snow from the streets through the sewers produced the highest rate of use for any hour during the year, when, on February 23, a rate of 27½ million gallons per day was recorded. Over 12,460,000 gallons were used for this purpose in four days last February. This heavy draught affected the pressure very materially and destroyed all fire protection in many districts. Many of the suburban users complained that they were entirely without service.

The largest use of water for fighting fire during the year was recorded on January 18, when the meter indicated that 1,388,000 gallons were used for extinguishing a fire in Fort street.

The regular sewer flushing, as nearly as can be determined, took 27,070,000 gallons of water during the year.

The largest amount used in any one day was 16,340,000 gallons on June 22, and the smallest use was 9,790,000 gallons on April 17.

The amount of water taken by our neighbors has increased over previous years, indicating more and more of a tendency on the part of the

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emergency users to depend on Springfield when help is needed. Agawam, East Longmeadow, and Ludlow took their entire supply from Springfield, while Chicopee, with 204 days of emergency use, and West Springfield, with 365, have reinforced their own systems from our mains. Westfield has asked for permission to supply a portion of their Mundale section, and this connection will probably be made in another year. Longmeadow, with an emergency connection, has not taken any water during the year. The section of Wilbraham supplied is directly connected with Springfield, and no separate records are kept. The various amounts used in 1921 are as follows:—

Little River Supply, Total amounts used:—	Gallons.	Increase or Decrease.
Agawam,	70,732,300	+8%
East Longmeadow,	13,805,600	+18%
Chicopee (204 days),	45,980,500	—3%
West Springfield,	86,416,800	+232%
Springfield (including West Wilbraham),	4,481,760,000	—2%
Total from Little River,	4,698,690,000	—1%
Ludlow Supply:—		
Ludlow Village (Ludlow Mfg. Associates),	77,008,400	+4%
Ludlow (direct),	7,770,764	+13%

Little River Supply, Use per day:—	Amount Gallons.	Per Capita.	Population.
Agawam,	193,800	38	5,128
East Longmeadow,	37,800	15	2,447
Springfield (including West Wilbraham),	12,280,000	90	136,854
Metropolitan District,	12,870,000		
Ludlow Supply, Use per day:—			
Ludlow,	232,300	30	7,762

The filters at Ludlow were operated during the summer season, when this water would otherwise be objectionable. The Ludlow system has given very satisfactory water and service to Ludlow, and has been kept in such condition that it is immediately available as an emergency supply for Springfield.

The supply of filtered water from the West Parish filters has been ample for all the needs of the city and throughout the year has been of excellent quality. Chemical and bacteriological analyses are made daily not only to aid in the operation of the filters, but to insure the continuous supply of excellent water. These daily analyses, with other details of filter operation, and the records of the daily uses of water in Springfield

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and in the various towns and cities dependent on Springfield water systems, are given in detail in the following appendices:—

XIII. Summary of Total Supply.
XIV. Daily Use of Water from Little River Supply,—All towns and city.
XV. Daily Use of Water by Agawam.
XVI. Daily Use of Water by Chicopee.
XVII. Daily Use of Water by East Longmeadow.
XVIII. Daily Use of Water by West Springfield.
XIX. Daily Use of Water by Springfield.
XX. Daily Use of Water by Ludlow Village—(Ludlow Manufacturing Associates).
XXI. Operating Details of West Parish Filters.
XXII. Operating Costs of West Parish Filters.
XXIII. Rainfall.

Respectfully submitted,

ELBERT E. LOCHRIDGE,
Chief Engineer.

BOARD OF WATER COMMISSIONERS, December 29, 1921.

Accepted and ordered made a part of the report of the Board to the City Council.

A. R. HATHAWAY, *Clerk.*

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APPENDIX TO

WATER COMMISSIONERS' REPORT

FOR 1921

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APPENDIX I.

SUMMARY OF STATISTICS
For the Year Ending November 30, 1921.

In form recommended by the New England Water Works Association.

MUNICIPAL WATER WORKS,
City of Springfield, Hampden County, Massachusetts.

GENERAL STATISTICS.

Population of Springfield by U.S. census of 1920, . . . 129,614
Estimated population of Springfield for 1921, . . . 136,354

Dates of construction:—

Original works in city (*not now in system*), as follows:—
Small supply from springs (by private enterprise), . . 1843
Van Horn reservoir supply (by Springfield Aqueduct Co.), . 1848
Enlargement of above supply (by Springfield Aqueduct Co.), 1864
Sale of above to City, for $238,296 (by Springfield Aqueduct Co.), 1872
(Plus interest paid, total cost=$250,010.58)

Works at Ludlow, Mass., ... 1873–1874–1875
Works at Belchertown, Mass. (auxiliary to Ludlow), 1890–1891
Additional main from Ludlow reservoir, . . . 1893–1894
Supply from Westfield Little River, . . . 1907–1910

By whom owned, ... City of Springfield

Source of supply used by Springfield District (filtered and metered):—
From Westfield Little River, storage capacity as follows:—

Borden brook reservoir (*impounding*), .	2,500,000,000 gallons
Intake reservoir (*diverting*), ...	40,600,000 gallons
Sedimentation basin (*before filtering*), . .	38,700,000 gallons
Provin mountain reservoir (*filtered*), . .	17,000,000 gallons
Total, ...	2,596,300,000 gallons

Source of supply used by adjoining town of Ludlow (filtered into standpipe during summer; unmetered):—
From impounding reservoirs in Ludlow and Belchertown (fed by natural streams, springs and surface water); storage capacity as follows:—
Total (*can be used by Springfield in emergency*), . . . 1,434,218,000 gallons

(Aggregate storage capacity, 4,030,518,000 gallons.)

Mode of supply, ... entirely by gravity

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REVENUE (*credited*)—1921.

(*In revised form recommended by Committee of N. E. W. W. A. in 1913.*)

Balance brought forward:—

a.	From ordinary (maintenance) receipts,—cash surplus transferred to sinking fund at end of year,		.....	
	Reserve fund for Lombard reservoir lot improvement,		$691 00	
	Reserve fund for Deferred Work,		20,000 00	
	Accounts receivable, Nov. 30, 1920,		78,571 79	
b.	From extraordinary receipts,		.....	
c.	Inventory of stock and stores on hand, Nov. 30, 1920,		233,857 72	
	Net total forward from 1920,			$333,120 51

Earnings from Water Rates:—

A.	Fixture Rates (*within city*):—			
a.	Domestic,	.....		
b.	Builders' use,	$534 75		
c.	Unclassified,	2,765 95		
			$3,300 70	
B.	Meter Rates (*within city*):—			
a.	Domestic,	$344,217 84		
b.	Commercial,	43,508 74		
c.	Industrial,	56,422 46		
d.	Institutional (includes churches),	7,393 69		
e.	Builders' use,	608 77		
f.	Unclassified,	4 00		
			452,155 50	
C.	Public Uses (*not charged for or collected*, per city ordinance):—			
a.	Hydrants,	$49,325 00		
b.	Fountains, ponds, etc.,	955 20		
c.	Street washing and sprinkling,	1,743 33		
d.	Public buildings,	13,549 47		
e.	Street and Engineering department, building purposes,	405 65		
f.	Park department uses,	1,705 90		
g.	Public playgrounds,	439 90		
h.	Sewer flushing,	2,000 00		
i.	Watering tanks and drinking fountains,	585 00		
j.	Snow removal via sewers,	830 66		
		$71,540 11	.....	
	Total from within city,		$455,456 20	

EXPENDITURES (*charged*)—1921.

Water Works Maintenance:—

AA.	Operating expenses (includes all maintenance except renewals and annual depreciation charges),			$234,365 59
BB.	Special:— Renewal and replacement work, distribution system,			14,717 82
CC.	Total maintenance and operating expenses charged 1921 (not including interest),			$249,083 41
DD.	Interest on bonds (amount paid), (CC plus DD equals $311,898 41)			62,815 00
EE.	Payment on bonds for new supply (old supply bonds are payable from sinking fund),			89,000 00
FF.	Payment to sinking fund (for Ludlow supply bonds),			6,000 00

Water Works Construction:—

GG.	Extension of mains,		$118,356 70	
HH.	Extension of services (paid for by consumers),		.....	
II.	Extension of meters (paid for by consumers),		.....	
JJ.	Special:—			
	Land and easements,	$15,721 58		
	Buildings, fixtures and grounds,	3,107 59		
	Structures and equipment, (less extension of mains, as above)	25,420 88		
			44,250 05	
			$162,606 75	
	Less sales and transfers,		112 38	
KK.	Net aggregate construction charged, 1921,			162,494 37

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D.	Other Miscellaneous Earnings:—			
	a. Water used outside city:—			
	Fixture rates,.....	$150 00		
	Meter rates,.....	23,574 67		
			23,724 67	
	Total water rates collectible,.....		$479,180 87	
	b. Water used by water works (included in its operating expenses),.....		64 75	
	Total operating revenues,.....			479,245 62
E.	General appropriations,.....			.....
F.	From municipal departments,.....			.....
G.	From tax levy,.....			.....
H.	From bonds,.....			.....
I.	From other sources:—			
	a. Non-operating income (sale of products, rentals, etc.),.....		$23,479 02	
	b. Delayed gains acct. prior periods,.....		6,944 63	
				30,423 65
J.	Total credited (including balance forward from prior year),.....			$842,789 78

LL.	Unclassified expenses:—			
	Delayed losses acct. prior periods, charged off in 1921,.....			897 38
	Net total charges in 1921,.....			$570,290 16
MM.	BALANCE, Nov. 30, 1921:—			
	Inventory of stock and stores on hand,.....		$159,703 82	
	Cash in hands of City Treasurer:—			
	Reserve fund for deferred work,.....		34,774 80	
	Accounts receivable:—			
	Committed to City Collector,—uncollected (includes Dec. 1, 1921, bills).....	$75,598 20		
	Not yet committed to City Collector,.....	2,423 30		
			78,021 50	
	Total balance carried forward,.....			272,499 62
N.	Total charged (in balance with total credited),.....			$842,789 78

Disposition of annual balances. Carried forward.

O.	Net *revised* cost of water works to date (see balance sheet),.....		$5,668,231 04
P.	Bonded debt at date:— Ludlow supply, bonds,.....	$150,000 00	
	Little River supply, bonds,.....	1,487,000 00	
			$1,637,000 00
Q.	Value of sinking fund at date (Ludlow supply bonds),.....		$133,066 69
R.	Average rate of interest:— on Ludlow supply bonds,.....		4%
	on Little River supply bonds,.....		3.69—%

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STATISTICS OF CONSUMPTION OF WATER.

(In revised form recommended by Committee of N. E. W. W. A. in 1918.)

1.	Year for which report is made,	1921
2.	Population—(Springfield district):—	
	a. Total—(Springfield, 136,354, and Wilbraham, 500) (estimated),	136,854
	b. On line of pipe (estimated),	135,156
	c. Supplied (estimated),	134,630
3.	Total number of active taps,	16,344
4.	Average number of persons per active tap (2*a*÷3),	8.37+
5.	Total number of metered taps,	16,095
6.	Per cent of active taps metered (5÷3),	98.47+
7.	Total water consumption is determined by 42" Venturi meter on supply main at Provin Mountain reservoir.	
8.	Water supplied from Little River system during *mean year* covered by consumers' meters:—	

(Recorded by consumers' meters, as follows):—

	In Springfield:—	*Gallons.*	*Per Cent of Total (8-n).*
	a. For domestic uses,	1,715,488,000	36.92
	b. For commercial uses,	466,131,300	10.03
	c. For industrial uses,	770,654,300	16.59
	d. For institutional uses,	72,110,700	1.55
	e. For builders' uses,	4,335,900	.09
	f. For charitable uses (free),	13,001,900	.28
	g. For public uses (uncollectible) (25.9% of such municipal services metered),	225,890,400	4.86
h.	Total in Springfield,	3,267,612,500	70.32
i.	Total in Wilbraham,	5,511,600	.12
j.	Total in Springfield district,	3,273,124,100	70.44
k.	Total outside Springfield district,	194,386,700	4.18
l.	Total recorded by consumers' meters,	3,467,510,800	74.62
m.	Lost by breaks and used to extinguish fires, as recorded on 42" Venturi meter charts,	3,114,000	.07
n.	Total accounted-for,	3,470,624,800	74.69
o.	Total unaccounted-for,—(unmetered sales, unmetered private fire supplies, unmetered public uses, lost and unrecorded),	1,176,005,200	25.31
p.	Total supplied from Little river system during *mean year* covered by consumers' meters	4,646,630,000	100.00

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9. Water supplied to Springfield district, 1921:—

a. Total for calendar year,	4,481,760,000 gallons
b. Percentage metered (8*j* ÷ 9*a*),	73.03+ per cent
c. Total average per day (9*a* ÷ 365 days),	12,280,000 gallons
d. Average per day per active tap (9*c* ÷ 3),	751 gallons
e. Average per day per consumer (9*c* ÷ 2*c*),	91 gallons
f. Average per day per capita (9*c* ÷ 2*a*),	90 gallons

STATISTICS RELATING TO DISTRIBUTION SYSTEM.

MAINS.

1.	Kind of pipe used:—wrought-iron cement-lined (formerly used by private aqueduct company and by city);—wrought-iron—for small and temporary mains,—and cast-iron and steel (used by city at present).	
2.	Sizes;—from one inch to fifty-four inches.	
3.	Extended during year (added to pipe table, including all changes, etc.),	43,340 feet
4.	Discontinued during year (deducted from pipe table, including all changes, etc.),	6,206 feet
5.	Total now in use (city, Indian Orchard, Wilbraham, and Ludlow),	243.65+miles
6.	Cost of repairs per mile (including big breaks),	$27.57+*
7.	Number of leaks per mile (total leaks=32),	0.13+
8.	Length of pipes less than 4 inches in diameter,	10.22—miles
9.	Number of hydrants added during year (public 54; private 0) (net)	54
10.	Number of hydrants (public=2,000, and private =130) now in use (city, Indian Orchard, and Wilbraham),	2,130
11.	Number of hydrants in Ludlow (public=19, private=108), now in use,	127
12.	Number of stop gates added during year (public and private) (net),	247
13.	Number of stop gates now in use,	6,535
14.	Number of gates smaller than 4-inch,	856
15.	Number of blow-offs (air valves),	131
16.	Range of pressure on mains:—	

	Maximum	Average
a. Main street level,	147 lbs.	140 lbs.
b. Hill section level,	87 lbs.	80 lbs.

*This includes $3,262.24, the final cost of permanent repairs to street at Water street underpass account break which occurred in 1920.

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SERVICES.

17. Kind of pipe used:—lead (formerly used by private aqueduct company);—cement-lined wrought-iron, and tarred wrought-iron (formerly used by city);—galvanized wrought-iron, lead-lined wrought-iron, and cast-iron (used by city at present).
18. Sizes from ½ to 10 inches.
19. Extended during year (in feet).
20. Discontinued during year (in feet).
21. Total now in use (in miles).

NOTE.—Services paid for entirely by the consumers, and no special statistics kept of them.

22. Number of services added during year (net) (to December 1st), 401
23. Total services December 1, 1921, ... 16,729
    a. Active services, ... 16,344
    b. Metered services, ... 16,095
24. Average length of service.
25. Average cost of service.

(See note under 19, 20, 21.)

26. Number of meters added (net to December 1st), . 495
27. Total meters December 1, 1921, ... 16,235
28. Percentage of active services metered, December 1, 1921, ... 98.47+
29. Percentage of net earnings collectible from metered water (to December 1st), ... 99.27+
30. Number of motors and elevators added and discontinued (net), ... +4
    a. Motors added, 0; discontinued, 0; . . . +0
    b. Elevators added, 4; discontinued, 0; . . . +4
31. Number of motors and elevators now in use, . . 424
    a. Motors, ... 65
    b. Elevators, ... 359

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APPENDIX II.

COMPARATIVE STATEMENT OF WATER RECEIPTS SINCE 1884.

(On annual basis of twelve months.)

Year.	Water Rates Charged—Gross Earnings. (*During the year, only.*)		Water Rates Collected. (*Including balances forward.*)	
	Totals.	Gain or Loss.	Totals.	Gain or Loss.
1885	$93,421 60	+$5,976 56	$90,848 05	+$5,262 34
1886	100,537 77	+ 7,116 17	97,298 78	+ 6,450 73
1887	108,140 94	+ 7,603 17	105,451 52	+ 8,152 74
1888	115,146 35	+ 7,005 41	112,581 21	+ 7,129 69
1889	126,220 72	+11,074 37	122,541 52	+ 9,960 31
1890*	133,553 28	+ 7,332 56	129,913 27	+ 7,371 75
1891	140,604 85	+ 7,051 57	136,985 11	+ 7,071 84
1892	150,515 67	+ 9,910 82	146,349 09	+ 9,363 98
1893	164,894 65	+14,378 98	160,936 78	+14,587 69
1894	167,376 11	+ 2,481 46	162,769 71	+ 1,832 93
1895	182,357 49	+14,981 38	178,421 15	+15,651 44
1896	194,069 28	+11,711 79	189,373 75	+10,952 60
1897	196,818 72	+ 2,749 44	192,132 58	+ 2,758 83
1898	209,183 12	+12,364 40	201,710 66	+ 9,578 08
1899	220,673 14	+11,490 02	213,061 24	+11,350 58
1900	225,798 96	+ 5,125 82	218,741 57	+ 5,680 33
1901*	233,227 98	+ 7,429 02	218,815 05	+ 73 48
1902*	231,594 98	— 1,633 00	223,903 08	+ 5,088 03
1903	245,358 59	+13,763 61	238,673 13	+14,970 05
1904	249,779 77	+ 4,421 18	244,767 77	+ 6,094 64
1905	259,133 06	+ 9,353 29	252,747 50	+ 7,979 73
1906*	263,746 17	+ 4,613 11	260,186 99	+ 7,439 49
1907*	267,263 78	+ 3,517 61	255,109 17	— 5,077 82
1908*	293,896 28	+26,632 50	291,108 15	+35,998 98
1909	302,230 17	+ 8,333 89	298,449 48	+ 7,341 33
1910	327,333 58	+25,103 41	322,845 84	+24,396 36
1911	344,591 64	+17,258 06	341,057 40	+18,211 56
1912*	341,515 25	— 3,076 39	333,607 69	— 7,449 71
1913	375,558 61	+34,043 36	359,274 81	+25,667 12
1914	397,823 84	+22,265 23	395,094 09	+35,819 28
1915*	393,394 68	— 4,429 16	395,046 41	— 47 68
1916	413,958 91	+20,564 23	411,423 13	+16,376 72
1917	446,889 60	+32,930 69	443,262 17	+31,839 04
1918	474,439 47	+27,549 87	470,113 46	+26,851 29
1919	465,706 80	— 8,732 67	463,232 40	— 6,881 06
1920	491,628 23	+25,921 43	490,011 57	+26,779 17
1921	479,767 80	—11,860 43	474,947 02	—15,065 55

*See explanatory notes in annual reports for years indicated.

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APPENDIX III.

SERVICE TAPS AND SUPPLY AND DISTRIBUTION MAINS SINCE 1884.

Year.	Service Taps.		Distribution Mains.		Supply and Distribution Mains in Use. (Miles.)
	Total Number.	Net Increase.	Extensions. (Feet.)	Cost of Extensions.	
1885	4,237	224	10,014	$11,235 33	75 01
1886	4,519	282	18,993	14,158 71	78 65
1887	4,819	300	17,244	14,600 36	81 55
1888	5,147	328	13,877	14,038 56	84 97
1889	5,497	350	29,059	26,418 94	91 11
1890	5,770	273	9,962	7,833 06	92 28
1891	6,181	411	14,927	10,396 00	94 86
1892	6,633	452	24,853	16,253 21	98 63
1893	7,000	367	25,079	17,090 71	102 97
1894	7,482	482	20,280	13,491 16	117 21*
1895	7,900	418	32,368	25,302 47	123 65
1896	8,298	398	23,521	21,018 62	127 80
1897	8,721	423	39,108	22,349 41	134 71
1898	9,070	349	28,810	16,042 36	140 08
1899	9,456	386	20,851	10,069 22	143 21
1900	9,764	308	9,880	6,362 20	144 69
1901	10,034	270	8,668	5,174 62	146 22
1902	10,221	187	5,353	3,060 71	147 34
1903	10,471	250	16,425	13,147 42	150 44
1904	10,641	170	9,767	6,163 18	152 20
1905	10,946	305	20,309	17,290 22	154 67
1906	11,175	229	17,027	24,054 14	156 84
1907	11,385	210	20,099	114,117 98*	160 42
1908	11,706	321	19,047	72,635 91*	161 85
1909	12,134	428	30,177	111,153 39*	174 87*
1910	12,545	411	45,520	152,570 23*	182 74
1911	12,985	440	31,816	43,044 79*	188 87
1912	13,407	422	31,159	39,747 99	195 11
1913	13,692*	473*	54,043	74,272 30	205 31
1914	14,126	434	39,634	64,429 03	212 69
1915	14,642	516	34,244	43,009 57	218 51
1916	15,248	606	22,425	27,858 26	223 02
1917	15,611	363	17,643	27,948 52	226 92
1918	15,641	30	2,786	9,058 14	227 59
1919	15,971	330	16,934	33,681 66	231 16
1920	16,328	357	27,264	83,342 52	236 62
1921	16,729	401	31,744	117,838 42	243 65

*See explanatory notes in annual report for 1920 and prior years indicated.

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APPENDIX IV.

CLASSIFICATION OF CONSUMERS, DECEMBER 1, 1921.

(Not including Ludlow Manufacturing Associates' private system in Ludlow Village.)

Classification.	Total, End of Year 1921.	Total, Beginning of Year 1921.	Increase or Decrease 1921.
Domestic:—			
Apartment Blocks,	877	874	+3
Dwellings (single),	6,724	6,530	+194
Dwellings (double),	312	312	....
Dwellings (tenement),	7,053	6,977	+76
Tenements (included in above),	33,291	32,780	+511
Commercial:—			
Banks,	18	17	+1
Business Blocks,	446	441	+5
Garages (public),	68	61	+7
Gasolene Stations,	15	11	+4
Greenhouses,	12	9	+3
Hotels,	17	18	—1
Restaurants,	116	106	+10
Stables (public),	10	10	....
Stores,	1,819	1,756	+63
Theaters,	8	7	+1
Industrial:—			
Breweries,	3	3	....
Dyehouses,	2	0	+2
Foundries,	20	19	+1
Gas Works,	1	1	....
Laundries (public),	58	58	....
Manufactories,	138	136	+2
Railroads,	4	4	....
Institutional:—			
Cemeteries,	6	6	....
Charitable Institutions,	12	12	....
Churches,	65	61	+4
Colleges,	2	2	....
Court House,	1	1	....
Hospitals,	5	5	....
Jail,	1	1	....
Libraries,	4	4	....
Post Offices,	4	4	....
Schools (private),	13	12	+1
State Militia Armory,	1	1	....
United States Armory,	1	1	....
Municipal (*Public Use*):—			
Drinking Fountains and Tanks,	24	26	—2
Fire Department Stations,	13	13	....
Fire Hydrants,	2,019	1,965	+54
Fountains,	20	19	+1
Parks,	24	23	+1
Playgrounds,	9	10	—1
Police Department Stations,	2	2	....
Reduction Plants,	2	2	....
Sanitary,	1	1	....
Schools,	45	44	+1
Street Sprinkling Hydrants,	177	183	—6
Fixtures:—			
Bath Tubs,	29,794	29,252	+542
Elevators,	359	355	+4
Motors,	65	65	....
Urinals,	1,172	1,105	+67
Water Closets,	45,743	44,867	+876

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APPENDIX V.

CLASSIFICATION OF SERVICES, DECEMBER 1, 1921.

CLASSIFICATION.	Sizes of Services.												Total, End of Year 1921.	Total, Beginning of Year 1921.	Increase or Decrease, 1921.
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	6"	8"	10"			
Revenue Services.															
Within City.															
Domestic Consumers,	7	74	10,137	3,207	337	86	5	1	7	2	..	..	13,868	13,500	+368
Domestic and Commercial Consumers,	1	3	214	257	83	46	6	11	10	2	..	..	633	602	+31
Commercial Consumers,	..	3	202	192	84	91	10	17	134	23	1	..	757	687	+70
Churches,	..	1	20	19	6	16	2	..	1	..	..	..	65	64	+1
Total—called "Commercial,"	8	81	10,573	3,675	510	239	23	29	152	27	1	..	15,318	14,853	+465
Industrial Consumers,	..	2	47	53	24	65	18	13	96	82	11	3	414	457	—43
Institutional Consumers,	..	..	11	22	10	17	4	4	10	4	1	..	83	81	+2
Public Uses,	..	1	6	3	2	..	..	..	..	1	..	..	13	9	+4
Total within City,	8	84	10,637	3,753	546	321	45	46	258	114	13	3	15,828	15,400	+428
Outside City.															
Commercial Consumers, Little River Transmission Main,	..	..	8	2	..	..	..	..	..	..	..	..	10	9	+1
Com'l Consumers, Ludlow,	..	3	110	31	1	1	1	..	5	..	..	..	152	147	+5
Com'l Consumers, Wilbraham,	..	..	37	26	2	5	..	..	..	..	..	..	70	68	+2
Industrial Consumers, Ludlow Mfg. Co.'s System,	..	..	..	..	..	..	..	..	..	..	1	1	2	2	..
Wholesale Service, Agawam,	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..
Wholesale Service, Chicopee,	..	..	..	..	..	..	..		..	..	1	..	1	1	..
Wholesale Service, East Longmeadow,	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..
Wholesale Service, Longmeadow	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..
Wholesale Service, West Springfield,	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..
Total outside City,	..	3	155	59	3	6	1	..	5	1	5	1	239	231	+8
Total Revenue Services,	8	87	10,792	3,812	549	327	46	46	263	115	18	4	16,067	15,631	+436

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CLASSIFICATION OF SERVICES, DECEMBER 1, 1921—(Concluded).

CLASSIFICATION.	Sizes of Services.												Total, End of Year 1921.	Total, Beginning of Year 1921.	Increase or Decrease, 1921.
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	6"	8"	10"			
Non-Revenue Services.															
Private Use.															
Domestic Consumers,	..	..	1	..	..	..	..	..	..	..	..	..	1	2	—1
Domestic and Commercial Consumers,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Commercial Consumers,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Churches,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total—called "Commercial,"	..	..	1	..	..	..	..	..	..	..	..	..	1	2	—1
Institutional Consumers,	..	..	1	3	1	..	..	..	..	..	..	..	5	5	..
Total Private Use in City,	..	..	2	3	1	..	..	..	..	..	..	..	6	7	—1
Commercial Consumers, Ludlow,	..	..	1	..	..	..	..	..	11	..	..	..	12	12	..
Total Private Use,	..	..	3	3	1	..	..	..	11	..	..	..	18	19	—1
Public (Municipal) Use.															
Buildings and Departments,	..	9	34	17	20	19	3	13	38	8	1	..	157	163	—6
Drinking Fountains and Tanks,	..	3	9	5	..	2	..	..	..	..	..	..	19	21	—2
Street Watering Hydrants:—															
Standpipes—cart sprinklers,	..	..	..	..	..	..	92	..	..	..	..	..	92	108	—16
Special hydts,—st. washing,	..	..	..	..	..	..	56	..	..	..	..	..	56	45	+11
Total Public Use,*	..	12	43	22	20	21	151	13	33	8	1	..	324	337	—13
Total Non-Revenue Services,	..	12	46	25	21	21	151	13	44	8	1	..	342	356	—14
Total Classified Services,	8	99	10,838	3,837	570	348	197	59	307	123	19	4	16,409	15,987	+422
Total Unclassified Services,	1	4	234	44	6	14	..	1	12	4	..	..	320	341	—21
Total Services,*	9	103	11,072	3,881	576	362	197	60	319	127	19	4	16,729	16,328	+401

*Fire Hydrants, Sewer Flush Gates, and Track Hydrants for street watering, owned by City, not included under "*Services*" in records.

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APPENDIX VI.

CLASSIFICATION OF METERS, DECEMBER 1, 1921.

CLASSIFICATION.	Sizes of Meters.										Total, End of Year 1921.	Total, Beginning of Year 1921.	Increase or Decrease. 1921.
	½" or ⅝"	¾"	1"	1¼"	1½"	2"	3"	4"	6"	8"			
Revenue Meters.													
Within City.													
Domestic Consumers,	9,859	3,291	604	48	73	17	2	1	1	..	13,896	13,512	+384
Domestic and Commercial Consumers,	215	232	142	11	32	25	13	4	1	..	675	649	+26
Commercial Consumers,	168	197	146	13	45	89	35	64	9	..	766	712	+54
Churches,	27	16	12	1	8	1	..	1	..	..	66	65	+1
Total—called "Commercial,"	10,269	3,736	904	73	158	132	50	70	11	..	15,403	14,938	+465
Industrial Consumers,	38	38	56	2	37	80	40	82	59	10	442	428	+14
Institutional Consumers,	13	19	17	2	5	12	7	5	2	..	82	81	+1
Public Uses,	7	2	1	1	..	1	..	1	..	..	13	9	+4
Total within City,	10,327	3,795	978	78	200	225	97	158	72	10	15,940	15,456	+484
Outside City.													
Commercial Consumers, Little River Transmission Main,	10	..	..	..	..	..	..	..	..	..	10	9	+1
Commercial Consumers, Ludlow	125	15	5	..	..	2	..	..	..	..	147	139	+8
Commercial Consumers, Wilbraham,	31	5	..	2	5	..	..	..	..	..	43	41	+2
Industrial Consumers, Ludlow Mfg. Co.'s System,	..	..	..	..	..	..	..	..	..	1	1	1	..
Wholesale Service, Agawam,	..	..	..	..	..	..	..	..	1	..	1	1	..
Wholesale Service, Chicopee,	..	..	..	..	..	..	..	..	1	..	1	1	..
Wholesale Service, East Longmeadow,	..	..	..	..	..	..	..	..	1	..	1	1	..
Wholesale Service, Longmeadow	..	..	..	..	..	..	..	..	..	..	..	..	..
Wholesale Service, West Springfield,	..	..	..	..	..	..	..	..	..	1	1	1	..
Total outside City,	166	20	5	2	5	2	..	..	3	2	205	194	+11
Total Revenue Meters,	10,493	3,815	983	80	205	227	97	158	75	12	16,145	15,650	+495

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CLASSIFICATION OF METERS, DECEMBER 1, 1921—(CONCLUDED).

CLASSIFICATION.	SIZES OF METERS. ½" or ⅝"	¾"	1"	1¼"	1½"	2"	3"	4"	6"	8"	Total, End of Year 1921.	Total, Beginning of Year 1921.	Increase or Decrease, 1921.
NON-REVENUE METERS. *Private Use.*													
Domestic Consumers,	1	..	..	..	..	..	..	..	..	..	1	2	—1
Domestic and Commercial Consumers,	..	..	..	..	..	..	..	..	..	..	..	..	..
Commercial Consumers,	..	..	..	..	..	..	..	..	..	..	..	..	..
Churches,	..	..	..	..	..	..	..	..	..	..	..	..	..
Total—called "Commercial,"	1	..	..	..	..	..	..	..	..	..	1	2	—1
Industrial Consumers,	..	..	..	..	..	..	..	..	..	..	..	..	..
Institutional Consumers,	..	1	3	..	1	..	..	..	..	..	5	5	..
Total Private Use,	1	1	3	..	1	..	..	..	..	..	6	7	—1
Public (Municipal) Use.													
Buildings and Departments,	11	6	6	1	3	17	22	12	3	1	82	81	+1
Drinking Fountains and Tanks,	..	1	1	..	..	..	..	..	..	..	2	2	..
Street Watering Hydrants,	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Public Use,	11	7	7	1	3	17	22	12	3	1	84	83	+1
Total Non-Revenue Meters,	12	8	10	1	4	17	22	12	3	1	90	90	..
Total Revenue and Non-Revenue Meters,	10,505	3,823	993	81	209	244	119	170	78	13	16,235	15,740	+495
Owned by Consumers,	10,498	3,818	987	80	207	227	103	162	75	12	16,169	15,676	+493
Owned by Water Works,	7	5	6	1	2	17	16	8	3	1	66	64	+2

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APPENDIX VII.

SUMMARY OF MAIN PIPE LAID AND TAKEN OUT IN 1921.

(Including Changes and Corrections.)

Divisions.	¾″	1″	1¼″	1½″	2″	4″	6″	8″	10″	12″	16″	Totals
PIPE LAID												
Owned by Private Parties												
Wrought-iron,.....	19	896	955	546	7,995	..	..	..	..	..	..	10,411
Owned by City												
Wrought-iron,.....	..	..	210	..	302	..	..	..	..	..	..	512
Cast-iron,..	..	..	..	..	..	128	1,323	19,931	3,835	2,049	5,151	32,417
Total Pipe Added,.....	19	896	1,165	546	8,297	128	1,323	19,931	3,835	2,049	5,151	43,340
PIPE TAKEN OUT OR ABANDONED												
Wrought-iron,.....	..	1,593	..	251	2,335	..	..	..	..	..	..	4,179
Cast-iron,.....	..	..	..	..	..	823	999	42	..	163	..	2,027
Total Pipe Deducted,....		1,593	..	251	2,335	823	999	42	..	163	..	6,206
Net Pipe Added, 1921,....	+19	—697	+1,165	+295	+5,962	—695	+324	+19,889	+3,835	+1,886	+5,151	+37,134

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APPENDIX VIII.

CHANGES IN TOTALS OF MAIN PIPE DURING 1921.

SUPPLY MAINS—(FEET).

Size in Inches.	In Use First of Year.	Laid During Year.	Abandoned and Taken Up During Year.	Net Change for Year.	In Use Close of Year.
8	130	....	....	....	130
10	90	....	....	....	90
16	1,304	....	....	....	1,304
20	561	....	....	....	561
24	24,942	....	....	....	24,942
30	17,516	....	....	....	17,516
36	14,162	....	....	....	14,162
42	61,976	....	....	....	61,976
54	1,851	....	....	....	1,851
Total	122,532	....	....	....	122,532

DISTRIBUTION MAINS—(FEET).

Size in Inches.	In Use First of Year.	Laid During Year.	Abandoned and Taken Up During Year.	Net Change for Year.	In Use Close of Year.
¾	....	19	....	+19	19
1	5,635	896	1,593	—697	4,938
1¼	10,879	1,165	....	+1,165	12,044
1½	8,103	546	251	+295	8,398
2	22,585	8,297	2,335	+5,962	28,547
4*	64,443	128	823	—695	63,748*
6*	451,157	1,323	999	+324	451,481*
8	283,215	19,931	42	+19,889	303,104
10	47,139	3,835	....	+3,835	50,974
12	73,847	2,049	163	+1,886	75,733
16	58,693	5,151	....	+5,151	63,844
20	7,903	....	....	....	7,903
24	37,962	....	....	....	37,962
30	35,456	....	....	....	35,456
36	17,723	....	....	....	17,723
42	2,070	....	....	....	2,070
Total	1,126,810*	43,340	6,206	+37,134	1,163,944*

*Includes parallel lines for services only, as follows:—
4"=18,816 feet.
6"=10,741 feet.

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APPENDIX IX.

SUMMARY OF SUPPLY AND DISTRIBUTION MAIN PIPE IN USE DECEMBER 1, 1921.

SIZES.	Wrought-Iron.	Cement-Lined.	Cast-Iron.	Steel. L=*Lock-bar.* R=*Riveted.*	TOTALS.
¾-inch.....	19	....	....	....	19
1-inch.....	4,938	....	....	....	4,938
1¼-inch...	12,044	....	....	....	12,044
1½-inch...	8,398	....	....	....	8,398
2-inch.....	28,547	....	....	....	28,547
4-inch.....	....	....	44,932	....	44,932
4-inch*....	....	....	18,816*	....	18,816*
6-inch.....	....	....	440,740	....	440,740
6-inch*....	....	....	10,741*	....	10,741*
8-inch.....	....	....	303,234	....	303,234
10-inch....	90	....	50,974	....	51,064
12-inch....	....	....	75,733	....	75,733
16-inch....	....	....	63,905	R1,243	65,148
20-inch....	....	....	8,464	....	8,464
24-inch....	....	29,365	33,475	R64	62,904
30-inch....	....	....	50,809	L2,163	52,972
36-inch....	....	....	31,567	R318	31,885
42-inch....	....	....	2,254	L61,792	64,046
54-inch....	....	....	....	L1,851	1,851
Feet.....	54,036	29,365	1,135,644	67,431	1,286,476
Miles....	10.24—	5.56+	215.08+	12.77+	243.65+

* For services only, not for fire protection.

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APPENDIX X.

SUMMARY OF GATES AND FIRE HYDRANTS SET AND TAKEN OUT IN 1921.

(Including Changes and Corrections.)

Divisions.	1″	1½″	2″	3″	4″	5″	6″	8″	10″	12″	16″	24″	Totals.
Gates Set, 1921, (Including Those Added),	2	5	39	..	19	..	108	81	26	8	10	2	300
Gates Taken Out, 1921, (Including Those Abandoned),	..	..	9	2	15	..	14	9	..	2	1	1	53
Net Gates Added, 1921,	+2	+5	+30	—2	+4	..	+94	+72	+26	+6	+9	+1	+247
Total Gates, Dec. 1, 1920,	..	..	..	..	..	..	..	..	..	..	..	..	6,288
Total Gates, Dec. 1, 1921,	..	..	..	..	..	..	..	..	..	..	..	..	6,535
Public Hydrants Set, 1921,	..	..	..	..	..	..	102	6	..	..	..	..	108
Public Hydrants Taken Out, 1921,	..	..	..	..	25	1	21	7	..	..	..	..	54
Net Public Hydrants Set, 1921,	..	..	..	..	—25	—1	+81	—1	..	..	..	..	+54
Private Hydrants Set, 1921,	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Hydrants, Dec. 1, 1920,	..	..	..	..	..	..	..	..	..	..	..	..	2,076
Total Hydrants, Dec. 1, 1921, (Not including Ludlow).	..	..	..	..	..	..	..	..	..	..	..	..	2,130

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APPENDIX XI.

CLASSIFICATION OF FIRE HYDRANTS

CONNECTED TO WATER WORKS SYSTEM, DECEMBER 1, 1921.

Divisions and Sizes.	Springfield.	Indian Orchard.	Wilbraham.	Total (not including Ludlow).	Ludlow.	Totals.
Public:						
8 inch.....	76	..	..	76	..	76
6 inch.....	1,558	60	4	1,622	..	1,622
5 inch.....	18	52	1	71	..	71
4 inch.....	213	18	..	231	19	250
Total public..	1,865	130	5	2,000	19	2,019
Private:						
8 inch.....	..	..	..	..	..	..
6 inch.....	29*	23	..	52*	92	144*
5 inch.....	..	4	..	4	..	4
4 inch.....	68	6	..	74	16	90
Total private.	97*	33	..	130*	108	238*
Total public and private hydrants..	1,962*	163	5	2,130*	127	2,257*

* Includes one hydrant on Little River supply main, Westfield.

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APPENDIX XII.

CLASSIFICATION OF STREET WATERING HYDRANTS, WATERING TANKS AND DRINKING FOUNTAINS

CONNECTED TO WATER WORKS SYSTEM, DECEMBER 1, 1921.

Divisions.	Springfield (City).	Indian Orchard.	Total.
Crane Hydrants For Cart Sprinklers			
Owned by Water Works,.....	48	8	56
Owned by Street Department,.....	33	3	36
Total Crane Hydrants (standpipes),.....	81	11	92
Track Hydrants For Car Sprinklers			
Owned by Street Department, ...	29	....	29
Special Hydrants For Street-Washing			
Owned by Street Department,.....	56	....	56
Total Street Watering Hydrants,.	166	11	177
Watering Tanks (for animals),.....	8	1	9
Drinking Fountains (for persons),..	13	2	15
Total Watering Tanks and Drinking Fountains,.....	21	3	24

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APPENDIX XIII.

SUMMARY OF TOTAL SUPPLY, 1921. SPRINGFIELD, MASS.

(For *Mean Year* Covered by Consumers' Meters.)

Little River Supply.

			Gallons.
Total Supply delivered from Provin Mountain Reservoir (as per 42″ Venturi meter),			4,646,630,000
Consumption recorded by Consumers' Meters, as follows:—			
In Springfield:—	Gallons.	Gallons.	
Private Consumers,	3,028,720,200		
Private Consumers (free) (charities),	13,001,900		
Public Uses (uncollectible) (25.9% of such municipal services metered),	225,890,400		
Total in Springfield,	3,267,612,500		
In Wilbraham:—			
Private Consumers,	5,511,600		
Total within Springfield District,		3,273,124,100	
For Agawam:—			
Wholesale Service,	71,212,600		
For Chicopee:—			
Wholesale Service,	28,045,300		
For East Longmeadow:—			
Wholesale Service,	14,075,500		
For West Springfield:—			
Wholesale Service,	81,053,300		
Total outside Springfield District,		194,386,700	
Total Recorded by Consumers' Meters,		3,467,510,800	
Lost by breaks and used to extinguish fires, as recorded on 42″ Venturi meter charts,		3,114,000	
Total Accounted-for,			3,470,624,800
Total Unaccounted-for,—(Unmetered Sales, Unmetered Private Fire Supplies, Unmetered Public Uses, Lost and Unrecorded) (25.31%),			1,176,005,200

Ludlow Supply.

Consumption recorded by Consumers' Meters, as follows:—		
For Ludlow Manufacturing Associates:—	Gallons.	
Wholesale Service for Village System,	77,789,000	
For other Consumers in Ludlow:—		
Private Consumers and Town Uses (except fire hydrants, etc.),	5,172,800	
Total Consumption recorded by Consumers' Meters, Ludlow Supply,		82,961,800

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APPENDIX XIV.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

TOTAL DRAUGHT BY METROPOLITAN DISTRICT, COMPRISING SPRINGFIELD, CHICOPEE,* WILBRAHAM, EAST LONGMEADOW, LONGMEADOW,* AGAWAM, AND WEST SPRINGFIELD.*

METERED AT PROVIN MOUNTAIN. IN MILLION GALLONS.

1921	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
1	10.05	12.57	12.20	12.28	10.33	14.45	12.47	13.81	14.02	13.25	14.05	13.05
2	10.07	12.64	11.91	11.38	12.50	14.29	11.71	12.96	14.75	11.95	13.29	12.77
3	12.70	12.54	11.80	10.40	12.19	13.86	11.41	13.20	13.17	14.12	13.34	11.95
4	12.62	12.47	11.87	13.30	12.02	12.32	11.97	13.13	11.56	13.68	13.37	11.97
5	12.79	11.31	11.03	13.16	11.29	11.59	13.46	13.27	12.49	14.17	12.05	13.63
6	12.82	10.52	10.16	12.94	12.05	14.68	13.57	12.17	14.96	14.14	11.65	13.29
7	12.81	12.75	12.75	12.16	11.13	14.15	14.93	11.28	15.55	14.03	14.54	12.81
8	11.27	12.74	12.41	12.44	10.43	14.46	13.28	13.74	14.96	12.31	14.19	12.91
9	10.20	12.40	12.32	11.65	12.85	13.85	12.34	13.64	15.01	11.56	14.05	12.96
10	12.90	12.25	12.46	10.11	12.63	13.81	11.41	13.47	14.35	14.48	13.84	12.03
11	12.53	12.31	12.16	12.89	13.55	12.52	13.91	13.13	12.47	13.86	11.79	11.12
12	12.58	11.48	11.35	12.48	12.61	11.63	13.52	13.48	15.06	12.04	12.59	13.44
13	12.67	10.58	10.26	12.65	12.31	13.95	14.20	12.38	15.62	13.76	11.51	12.88
14	12.24	12.80	12.91	12.51	11.41	13.98	13.91	11.19	15.35	13.65	13.84	13.09
15	11.33	12.74	12.58	11.91	10.64	14.68	13.03	13.74	15.07	12.32	13.49	13.42
16	10.43	12.41	12.66	11.33	13.19	14.37	12.30	13.27	15.11	11.65	13.22	13.11
17	13.42	12.27	12.53	9.79	14.03	13.66	11.35	13.17	13.67	14.25	12.99	11.43
18	14.38	12.31	12.32	12.24	13.78	12.62	14.21	13.11	12.97	14.00	13.07	11.34
19	13.69	11.29	11.20	10.66	13.26	11.65	14.03	13.19	16.11	14.20	11.56	13.55
20	13.07	10.12	10.27	12.56	13.66	15.56	14.13	12.08	15.85	13.46	10.88	13.04
21	12.58	13.78	13.07	12.55	13.13	15.88	13.47	11 03	15.71	13.35	13.46	13.44
22	11.32	14.69	12.56	12.16	12.01	16.34	13.21	14.53	15.40	11.92	13.71	13.73
23	10.45	15.45	12.60	10.71	13.77	14.89	12.22	13.47	14.93	11.77	12.94	12.86
24	13.48	15.28	12.32	10.13	13.61	15.72	11.47	13.59	13.76	14.59	10.79	11.54
25	13.74	12.24	12.71	12.75	13.37	13.86	14.89	13.33	12.39	14.14	12.32	10.60
26	13.33	11.21	11.37	12.20	13.64	11.89	14.70	13.47	15.52	14.08	11.28	10.91
27	13.85	10.19	10.14	12.06	13.58	16.01	15.18	12.16	14.19	13.85	10.89	13.44
28	12.49	12.15	12.93	12.43	12.09	14.52	14.45	11.51	14.74	13.92	14.26	12.88
29	11.43	.....	12.60	12.03	10.78	14.45	13.76	14.60	14.45	12.21	13.17	12.65
30	10.46	.....	12.55	10.55	11.71	13.17	12.78	14.78	14.25	11.58	13.43	13.20
31	12.87	.....	12.24	.....	14.57	.....	11.76	14.28	.....	14.41	.....	13.00
Total	379.57	345.49	372.24	356.41	388.12	418.81	409.03	406.18	433.44	412.80	385.56	391.04
Aver.	12.24	12.34	12.01	11.88	12.52	13.96	13.19	13.10	14.45	13.32	12.85	12.61

*Emergency connection only.

Total amount for 1921 =4,698,690,000 gallons. Daily average =12,870,000 gallons.

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APPENDIX XV.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

Water Used by Town of Agawam.

Metered on 42″ Line—Feeding Hills. In Gallons.

1921	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*162,800	151,100	187,200	175,800	*193,400	238,000	190,900	242,300	247,300	*172,000	155,800	143,000
2	*162,800	144,900	158,400	*179,100	169,500	261,800	*275,100	222,300	237,900	*172,100	169,500	152,500
3	162,400	153,500	141,000	*179,200	197,900	229,600	*275,100	213,600	*276,200	165,100	158,400	*126,600
4	153,500	160,600	165,800	184,600	171,200	*248,100	*275,200	218,400	*276,300	165,800	165,600	*126,600
5	141,000	*168,000	*170,600	169,700	175,800	*248,200	*275,200	223,200	238,100	162,600	*170,100	198,400
6	171,100	*168,100	*170,600	210,700	197,600	304,100	220,600	*210,600	229,900	176,700	*170,100	148,400
7	153,000	141,300	155,700	151,100	*190,000	261,400	228,000	*210,700	214,000	190,300	173,100	179,900
8	*166,900	*150,700	147,900	187,600	*190,000	270,500	*148,700	253,400	236,900	*190,100	183,300	118,600
9	*167,000	*150,800	156,200	*166,900	219,600	269,500	*148,600	210,800	224,900	*190,100	181,000	172,700
10	163,100	167,800	*160,900	*167,000	253,300	237,600	*148,700	219,300	*214,500	187,100	*192,600	*166,800
11	*154,600	135,100	*160,900	182,100	267,700	*239,700	214,800	225,600	*214,600	*180,400	*192,500	*166,900
12	*154,700	*199,100	*160,700	175,200	*220,600	*239,800	*201,100	219,500	209,200	*180,500	*182,800	152,600
13	*154,700	*199,200	*160,800	202,400	*220,600	278,000	*201,200	*213,500	197,900	219,800	*182,800	150,200
14	159,200	157,100	158,100	169,700	*195,600	258,100	266,600	*213,600	222,200	214,500	172,200	143,800
15	*169,200	161,000	155,600	187,100	*195,700	282,400	189,900	*237,900	183,000	*180,200	174,900	138,100
16	*169,200	155,400	157,200	*165,400	210,500	285,300	*223,600	*238,000	198,700	*180,200	187,700	157,700
17	*169,300	174,200	154,600	*165,500	196,900	287,900	*223,600	208,100	*193,300	166,000	156,100	*150,700
18	165,000	154,700	156,400	*171,800	188,800	*338,000	261,400	209,400	*193,300	175,100	163,900	*150,800
19	157,100	*174,800	*172,000	*171,800	194,300	*338,100	222,100	241,400	184,900	166,100	*166,900	147,900
20	159,000	*174,900	*172,100	195,600	211,800	343,500	176,900	*235,700	171,200	167,800	*166,900	150,300
21	156,100	*157,100	172,300	191,200	*214,200	395,500	195,100	*235,800	171,400	166,700	192,100	161,800
22	*168,600	*157,200	160,500	185,400	*214,200	311,600	202,800	237,600	178,000	*171,900	280,500	157,000
23	*168,700	133,900	167,000	*187,400	202,400	297,400	*214,900	190,800	185,300	*171,900	*176,900	148,900
24	177,300	143,300	159,800	*187,400	182,900	437,100	*214,900	204,700	*176,300	174,800	*176,900	*153,500
25	177,200	165,100	166,000	188,600	165,300	*355,500	280,900	204,200	*176,300	206,100	186,700	*153,500
26	165,900	*159,600	*166,100	190,800	206,500	*355,500	254,500	214,500	195,600	163,700	*154,300	*153,500
27	175,200	*159,600	*166,100	193,800	258,400	289,200	279,100	*211,400	214,500	179,700	*154,300	163,500
28	146,300	126,200	161,500	206,200	*229,300	297,700	245,100	*211,400	209,700	178,600	*154,300	156,600
29	*159,600	.....	174,700	172,700	*229,400	291,700	226,900	290,100	97,100	*179,700	154,300	157,400
30	*159,600	.....	174,500	*193,500	*229,400	196,000	*221,900	238,500	186,500	*179,800	138,300	197,900
31	173,000	.....	171,800	.....	243,800	.....	*222,000	224,400	.....	159,800	.....	156,300
Total	5,043,000	4,444,300	5,063,000	5,455,300	6,436,600	8,686,800	6,925,400	6,930,700	6,155,000	5,555,200	5,234,700	4,802,300
Aver.	162,700	159,000	163,300	181,800	207,600	289,600	223,400	223,600	205,200	179,200	174,500	154,900

*Daily averages computed from readings taken two or more days apart.

Total amount for 1921 = 70,732,300 gallons. Daily average = 193,800 gallons.

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APPENDIX XVI.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

WATER USED BY CITY OF CHICOPEE.

METERED ON NORTH MAIN ST. IN GALLONS.

1921	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	†230,000	202,700	196,700	213,200	*230,900	192,300	*234,200
2	.....	†230,000	*198,700	202,000	240,900	*230,900	215,400	*234,100
3	.....	†230,000	*198,700	231,900	*199,700	*230,900	214,700	*242,400
4	.....	†230,000	*198,800	224,400	*199,700	260,300	238,600	*242,300
5	.....	†230,000	236,400	236,400	*199,800	152,800	*200,100	226,700
6	.....	224,400	271,600	*217,700	*254,700	252,800	*200,100	231,900
7	.....	234,100	198,200	*217,700	*254,700	181,800	226,700	225,900
8	.....	217,700	188,500	190,700	208,000	*249,100	*224,800	230,400
9	.....	*271,200	*130,900	171,300	187,000	*249,100	*224,800	240,900
10	.....	*271,200	*130,900	296,200	*220,300	214,700	*244,200	*207,900
11	.....	*194,500	.....	240,100	*220,300	*239,000	*244,300	*208,000
12	.....	*194,500	.....	*216,700	*237,500	*239,000	*245,700	237,100
13	.....	252,800	.....	*216,700	*237,500	235,600	*245,700	255,100
14	.....	264,800	.....	*216,700	248,400	205,000	172,100	231,100
15	.....	167,600	.....	*291,800	255,800	*195,600	*257,300	214,700
16	.....	233,400	.....	*291,700	168,300	*195,600	*257,300	236,400
17	.....	304,500	.....	*311,900	*196,700	243,100	143,600	*226,300
18	.....	224,400	.....	*312,000	*196,700	255,100	*219,200	*226,300
19	.....	156,300	.....	*200,500	313,500	190,000	*227,800	222,900
20	.....	392,000	.....	*200,500	230,400	190,800	*227,800	219,200
21	.....	224,400	.....	*200,400	189,300	236,400	213,200	243,900
22	.....	285,800	.....	255,100	227,400	*195,600	255,800	219,900
23	.....	144,400	.....	250,600	216,900	*195,600	*215,400	269,300
24	.....	204,200	.....	256,600	*243,500	261,800	*215,500	*240,900
25	.....	*180,600	.....	175,000	*243,500	243,100	266,300	*240,800
26	.....	*180,700	*203,100	239,400	254,300	248,400	*172,100	*240,900
27	†115,000	216,200	*203,100	*204,200	*254,700	257,300	*172,100	242,400
28	†230,000	217,700	*203,100	*204,200	*254,700	215,400	380,000	240,900
29	†230,000	282,000	*203,100	247,600	319,400	*191,900	237,100	290,200
30	†230,000	150,300	*203,100	226,700	151,900	*191,900	225,900	175,000
31	†230,000	.....	*203,100	246,900	.....	261,100	.....	188,500
Total	1,035,000	6,839,700	3,174,000	7,190,300	6,838,700	6,940,400	6,775,900	7,186,500
Aver.	230,000	228,000	200,000	232,000	228,000	224,000	226,000	232,000

*Daily averages computed from readings taken two or more days apart.
†Amount estimated. Meter out of order.
Total amount for 1921 =45,980,500 gallons. Daily average=225,400 gallons.

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APPENDIX XVII.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

Water Used by Town of East Longmeadow.

Metered at Springfield—E. Longmeadow Line. In Gallons.

1921	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	*42,100	32,700	*51,400	42,000	*61,400	30,000	30,300	31,600	39,700	*42,300	28,500	*30,600
2	42,200	21,600	*51,500	*49,500	51,000	47,800	*42,000	28,600	44,600	*42,400	31,700	*30,700
3	42,700	25,900	57,100	*49,600	55,100	16,400	*42,100	30,900	*38,600	23,800	30,000	*35,700
4	44,400	26,800	45,500	47,600	53,200	*34,200	*42,100	34,800	*38,600	31,100	32,900	*35,800
5	68,700	*33,700	*47,600	46,900	38,000	*34,200	47,400	42,000	*38,700	40,400	*34,400	26,700
6	32,900	*33,700	*47,700	42,100	48,300	39,200	31,200	*35,600	38,700	20,900	*34,400	34,300
7	49,400	25,800	54,000	*47,500	*44,200	48,200	45,700	*35,700	35,500	31,000	32,100	28,400
8	*59,200	26,000	41,000	*47,500	*44,300	29,600	22,400	23,700	35,700	*36,800	30,400	27,100
9	*59,200	27,400	60,100	*47,500	41,200	*34,000	*41,900	34,600	30,700	*36,900	30,000	27,900
10	40,600	40,100	63,100	*47,500	38,200	*34,000	*41,900	31,300	*43,100	29,300	*32,700	*33,100
11	53,500	19,300	48,700	30,300	32,600	*34,900	*31,200	33,400	*43,100	*32,200	*32,700	*33,200
12	50,400	*32,900	*68,700	31,700	46,400	*34,900	*31,300	*35,500	32,800	*32,300	*35,900	29,000
13	*45,100	*33,000	*68,700	23,800	26,100	30,900	42,300	*35,600	39,100	40,400	*36,000	30,300
14	*45,300	30,600	47,400	30,800	*38,900	46,200	44,600	*35,500	36,700	26,500	25,400	*30,900
15	*57,100	29,400	31,900	43,500	*39,000	36,300	34,400	*35,600	36,200	*34,800	32,100	*31,000
16	*57,100	29,900	52,300	*45,000	34,000	46,000	*36,400	*35,100	36,100	*34,300	29,700	30,000
17	51,700	36,200	51,700	*45,100	47,500	39,400	*36,500	*35,100	*36,100	34,000	20,900	*32,800
18	60,700	34,500	41,500	*61,800	27,800	*37,900	46,600	*27,200	*36,100	38,600	21,900	*32,800
19	32,200	*43,500	*54,200	*61,800	33,200	*38,000	32,700	*27,200	42,200	34,600	*35,800	33,000
20	32,600	*43,600	*54,300	23,800	32,000	58,600	33,800	*34,900	39,900	26,200	*35,800	31,200
21	30,200	*36,300	53,200	39,500	*46,900	50,200	36,600	*35,000	18,200	34,900	35,300	31,900
22	*39,000	*36,300	42,200	42,600	*46,900	64,000	24,400	42,900	33,300	*37,800	38,000	47,000
23	*39,000	43,700	43,100	*45,400	34,200	27,700	*31,300	37,000	33,000	*37,800	32,900	29,800
24	39,600	21,800	30,900	*45,500	23,900	57,300	*31,300	36,200	*36,600	30,900	33,000	*37,400
25	36,600	33,300	52,900	50,300	20,400	*49,900	37,900	29,600	*36,600	34,100	25,600	*37,500
26	37,400	*39,200	*48,100	40,700	28,100	*49,900	32,500	34,400	30,900	37,200	26,900	*37,500
27	32,300	*39,200	*48,100	42,400	47,300	44,200	34,400	*36,800	*36,400	31,100	27,000	25,200
28	31,500	43,400	57,200	35,900	*33,700	35,300	33,200	*36,900	*36,400	34,300	34,300	40,300
29	*35,000	.....	37,900	36,800	*33,700	43,000	33,900	44,100	33,900	*38,700	26,600	27,000
30	*35,000	.....	46,700	*61,500	*33,800	27,200	*32,000	30,800	32,000	*38,600	30,100	35,100
31	22,400	.....	39,300	.....	37,700	.....	*32,000	38,400	.....	26,900	.....	35,700
Total	1,345,000	920,500	1,538,000	1,305,900	1,219,000	1,199,400	1,116,200	1,068,100	1,089,500	1,052,100	943,000	1,008,900
Aver.	43,400	32,900	49,600	43,500	39,300	40,000	36,000	34,500	36,300	33,900	31,400	32,500

*=Daily averages computed from readings taken two or more days apart.
Total amount for 1921 =13,805,600 gallons. Daily average =37,800 gallons.

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APPENDIX XVIII.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

WATER USED BY TOWN OF WEST SPRINGFIELD.

METERED AT KING'S HIGHWAY. IN GALLONS.

1921	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*182,100	*225,400	*190,400	*183,800	†200,000	145,900	118,200	*332,600	*277,600	*290,200	*206,000	*205,000
2	*182,100	*225,400	*190,400	*183,800	*72,900	216,900	*126,700	*332,600	*277,500	*290,200	*206,000	*205,100
3	*182,100	*225,400	*190,400	*183,800	*73,000	103,200	*126,700	*332,700	*333,700	*212,200	*206,000	*205,000
4	*182,100	*225,400	*190,400	*183,800	*55,700	*150,700	*126,700	*329,500	*333,600	*212,200	*206,000	*205,100
5	*183,100	*225,400	*190,400	*183,800	*55,700	*150,700	162,300	*329,500	*333,600	*212,200	*205,900	*205,000
6	*182,100	*225,400	*190,500	*183,800	*67,100	169,800	*108,100	*352,700	*331,400	255,900	*205,800	*205,100
7	*182,100	*225,300	*190,500	*183,800	*67,100	158,600	*108,100	*352,700	*331,400	*233,600	*255,800	*205,000
8	*176,500	*217,500	*190,500	*183,800	*67,100	157,100	68,100	*323,000	*307,600	*233,700	*255,800	*205,100
9	*176,500	*217,500	*190,500	*183,800	*59,800	*161,200	*109,200	*323,000	*307,600	*233,600	*255,800	*205,000
10	*176,400	*217,500	*190,500	*183,800	*59,900	*161,200	*109,200	*323,000	*307,600	*237,600	*255,800	*196,200
11	*176,400	*217,500	*194,700	†183,800	68,100	*150,700	*104,200	*323,000	*307,700	*237,700	*255,800	*196,200
12	*176,400	*217,500	*194,700	†183,800	56,100	*150,700	*104,200	*304,200	*388,000	*237,600	*255,800	*196,200
13	*176,400	*217,400	*194,700	†183,800	*128,300	169,800	*104,200	*304,200	*388,000	*241,600	*255,900	*196,200
14	*176,400	*217,400	*194,700	†183,800	*128,300	197,500	151,900	*304,200	*637,900	*241,600	*255,900	*196,200
15	*193,100	*201,100	*194,700	†183,800	*128,300	76,300	*116,900	*304,200	835,600	*250,000	*179,800	*196,300
16	*193,100	*201,100	*194,700	†183,800	*128,300	112,200	*117,000	*304,200	632,100	*250,100	*179,700	*196,200
17	*193,100	*201,100	*194,700	†183,800	1,104,900	114,500	*116,900	*304,200	*757,000	*250,000	*179,700	*196,300
18	*193,100	*201,100	*194,800	†183,800	501,200	140,600	*74,800	*304,200	*757,000	*250,100	*179,700	*196,200
19	*193,100	*201,100	*194,800	†183,800	397,200	115,200	*74,800	*304,200	976,900	*230,400	*179,700	*251,200
20	*193,100	*201,200	*194,800	†183,800	*397,700	133,200	73,200	*304,200	1,000,900	*230,500	*179,700	*251,100
21	*193,100	*201,200	*213,100	†183,800	*397,700	127,200	241,600	*304,100	862,500	*230,400	*179,700	*251,200
22	*176,700	*201,200	*213,100	†183,800	*397,700	156,300	200,500	*304,200	954,500	*229,600	*179,700	*251,100
23	*176,700	*201,200	*213,100	†183,800	*386,300	93,500	*230,300	*326,500	974,700	*229,700	*179,700	*251,200
24	*176,700	*182,800	*213,100	†183,800	*386,400	119,700	*230,300	*326,500	*972,300	*238,400	*179,700	*251,100
25	*176,600	*182,800	*213,100	†183,800	*96,700	*124,200	*279,400	*295,300	*972,900	*238,500	*179,700	*251,200
26	*176,600	*182,800	*213,100	†183,800	*96,800	*124,200	*279,400	*295,300	892,400	*238,400	*179,700	*251,100
27	*176,600	*182,800	*213,100	†183,800	58,200	114,500	*331,000	*295,300	*346,000	*238,500	*179,700	*251,200
28	*176,600	*182,800	*213,100	†183,800	*184,500	117,500	*331,000	*295,300	*346,000	227,400	162,300	*251,100
29	*179,800	.....	*213,200	†183,800	*184,500	138,400	309,700	*318,400	323,900	*221,200	*205,000	*251,200
30	*179,800	.....	*213,200	†183,800	*184,500	89,000	*305,200	*318,400	210,200	*221,100	*204,900	*251,100
31	*179,800	.....	*213,200	.....	164,600	.....	*305,200	*318,400	.....	*221,200	.....	229,700
Total	5,637,200	5,824,200	6,196,100	5,514,000	6,358,700	4,140,500	5,246,100	9,789,800	17,328,600	7,335,400	6,190,900	6,855,100
Aver.	182,000	208,000	200,000	184,000	205,100	138,000	169,000	315,800	577,600	236,600	206,400	221,100

*Daily averages computed from readings taken two or more days apart.

†Amount estimated. Meter out of order.

Total amount for 1921 = 86,416,800 gallons. Daily average = 236,800 gallons.

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APPENDIX XIX.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

Water Used in City of Springfield.

Metered at Provin Mountain. In Million Gallons.

1921	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	9.67	12.16	11.77	11.87	9.88	13.80	11.93	13.01	13.24	12.52	13.46	12.44
2	9.69	12.24	11.51	10.97	12.21	13.53	11.06	12.19	13.95	11.22	12.67	12.15
3	12.32	12.13	11.41	9.99	11.86	13.28	10.77	12.39	12.33	13.48	12.73	11.34
4	12.23	12.05	11.46	12.87	11.74	11.66	11.34	12.32	10.71	13.01	12.73	11.36
5	12.40	10.89	10.62	12.76	11.02	10.92	12.74	12.44	11.68	13.61	11.44	12.97
6	12.44	10.10	9.75	12.51	11.73	13.95	12.94	11.35	14.11	13.43	11.04	12.67
7	12.43	12.36	12.36	11.77	10.83	13.45	14.34	10.46	14.71	13.40	13.85	12.17
8	10.87	12.34	12.03	12.02	10.13	13.78	12.85	12.95	14.17	11.60	13.51	12.33
9	9.80	12.00	11.91	11.25	12.53	13.12	11.92	12.90	14.26	10.85	13.35	12.31
10	12.52	11.82	12.05	9.71	12.28	13.10	10.98	12.60	13.56	13.81	13.12	11.43
11	12.15	11.93	11.75	12.50	13.18	11.91	13.57	12.31	11.69	13.17	11.07	10.51
12	12.20	11.03	10.93	12.09	12.28	11.00	13.19	12.70	14.19	11.35	11.88	12.83
13	12.29	10.14	9.83	12.24	11.93	13.22	13.85	11.61	14.30	13.02	10.79	12.25
14	11.86	12.40	12.51	12.13	11.05	13.21	13.44	10.42	14.00	12.97	13.22	12.49
15	10.90	12.35	12.20	11.50	10.28	14.12	12.69	12.87	13.75	11.64	12.84	12.84
16	10.01	12.02	12.26	10.92	12.82	13.70	11.92	12.40	14.07	10.98	12.56	12.49
17	13.00	11.86	12.13	9.40	12.68	12.92	10.98	12.31	12.49	13.56	12.49	10.82
18	13.96	11.93	11.93	11.83	13.06	11.88	13.82	12.26	11.80	13.29	12.48	10.73
19	13.31	10.88	10.77	10.24	12.64	11.00	13.71	12.42	14.59	13.69	10.94	12.90
20	12.68	9.71	9.86	12.16	13.02	14.64	13.84	11.30	14.41	12.85	10.28	12.39
21	12.20	13.38	12.63	12.14	12.46	15.08	12.99	10.25	14.47	12.69	12.84	12.76
22	10.93	14.29	12.15	11.75	11.35	15.52	12.78	13.69	14.00	11.28	12.95	13.05
23	10.07	15.06	12.18	10.29	13.15	14.32	11.75	12.67	13.51	11.13	12.33	12.16
24	13.08	14.93	11.91	9.72	13.03	14.90	10.99	12.77	12.33	13.89	10.21	10.86
25	13.35	11.86	12.28	12.32	13.08	13.15	14.29	12.63	10.98	13.42	11.64	9.93
26	12.94	10.83	10.95	11.79	13.30	11.19	13.93	12.69	14.14	13.39	10.74	10.22
27	12.47	9.81	9.70	11.65	13.10	15.34	14.32	11.41	13.34	13.14	10.36	12.75
28	12.14	11.80	12.50	11.99	11.41	13.85	13.64	10.76	13.90	13.26	13.53	12.19
29	11.06	.....	12.17	11.64	10.11	13.70	12.96	13.70	13.68	11.58	12.55	11.92
30	10.08	.....	12.11	10.11	11.03	12.70	12.02	13.97	13.67	10.95	12.82	12.54
31	12.50	.....	11.82	.....	13.90	.....	11.01	13.45	.....	13.74	.....	11.39
Total	367.55	334.30	359.44	344.13	373.11	397.93	392.56	381.20	402.02	391.91	366.42	371.19
Aver.	11.86	11.94	11.60	11.47	12.04	13.26	12.66	12.30	13.40	12.64	12.21	11.97

N. B.—About eighty houses in Wilbraham supplied with Little River water.
Total amount for 1921 = 4,481,760,000 gallons. Daily average = 12,280,000 gallons.

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APPENDIX XX.

LUDLOW RESERVOIR SUPPLY, SPRINGFIELD, MASS.

WATER USED BY LUDLOW MANUFACTURING ASSOCIATES.

METERED AT LUDLOW MAIN NO. 1. IN GALLONS.

1921	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*201,000	212,000	198,000	223,000	*184,500	241,000	189,000	201,000	234,000	*187,000	204,000	173,000
2	*201,000	226,000	195,000	*196,500	200,000	244,000	*222,000	201,000	231,000	*187,000	188,000	162,000
3	223,000	219,000	201,000	*196,500	201,000	253,000	*222,000	285,000	*193,000	196,000	191,000	*133,500
4	227,000	221,000	239,000	217,000	189,000	*224,500	264,000	165,000	*193,000	194,000	194,000	*133,500
5	212,000	*206,000	*209,500	222,000	196,000	*224,500	197,000	†217,000	*193,000	189,000	*159,500	184,000
6	222,000	*206,000	*209,500	225,000	197,000	248,000	228,000	*182,000	200,000	202,000	*159,500	163,000
7	239,000	201,000	221,000	209,000	*196,500	264,000	*184,000	*182,000	214,000	215,000	160,000	151,000
8	*210,500	196,000	214,000	278,000	*196,500	273,000	*184,000	299,000	207,000	*178,500	161,000	152,000
9	*210,500	198,000	207,000	*207,000	208,000	275,000	*267,000	223,000	215,000	*178,500	151,000	158,000
10	223,000	221,000	211,000	*207,000	206,000	296,000	*267,000	199,000	*202,000	216,000	*150,500	*141,500
11	235,000	211,000	231,000	221,000	207,000	*232,500	234,000	200,000	*202,000	*199,000	*150,500	*141,500
12	220,000	*204,500	*202,000	228,000	201,000	*232,500	249,000	207,000	199,000	*199,000	*144,000	151,000
13	227,000	*204,500	*202,000	216,000	213,000	227,000	245,000	*191,500	210,000	194,000	*144,000	155,000
14	210,000	204,000	199,000	216,000	*193,500	235,000	259,000	*191,500	197,000	223,000	145,000	165,000
15	*211,000	203,000	303,000	219,000	*193,500	260,000	268,000	190,000	199,000	*190,000	147,000	173,000
16	*211,000	210,000	333,000	*212,500	208,000	276,000	*242,000	234,000	201,000	*190,000	140,000	185,000
17	210,000	252,000	341,000	*212,500	217,000	271,000	*242,000	197,000	*188,000	200,000	143,000	*162,500
18	227,000	227,000	325,000	*203,500	234,000	*255,500	273,000	194,000	*188,000	211,000	†174,000	*162,500
19	245,000	*203,000	*233,000	*203,500	230,000	*255,500	236,000	205,000	204,000	214,000	*162,000	181,000
20	240,000	*203,000	*233,000	219,000	237,000	320,000	255,000	*200,000	200,000	208,000	*162,000	207,000
21	232,000	*199,000	278,000	217,000	*237,500	329,000	244,000	*200,000	199,000	221,000	183,000	203,000
22	*201,500	*199,000	276,000	218,000	*237,500	335,000	264,000	233,000	199,000	*205,500	157,000	247,000
23	*201,500	206,000	262,000	*211,000	205,000	277,000	*244,500	213,000	218,000	*205,500	*135,000	182,000
24	220,000	209,000	215,000	*211,000	224,000	336,000	*244,500	205,000	*194,000	212,000	*135,000	*172,000
25	226,000	212,000	230,000	219,000	212,000	*272,000	291,000	175,000	*194,000	213,000	169,000	*172,000
26	222,000	*203,000	*196,000	201,000	228,000	*272,000	274,000	212,000	194,000	200,000	*146,500	155,000
27	212,000	*203,000	*196,000	*205,500	248,000	317,000	273,000	*195,000	215,000	205,000	*146,500	183,000
28	210,000	204,000	204,000	*205,500	*218,500	221,000	274,000	*195,000	209,000	217,000	157,000	175,000
29	*213,000	.....	219,000	213,000	*218,500	215,000	281,000	206,000	219,000	*188,000	161,000	154,000
30	*213,000	.....	196,000	*184,500	201,000	208,000	214,000	215,000	206,000	*188,000	150,000	186,000
31	212,000	.....	205,000	.....	257,000	.....	246,000	191,000	.....	198,000	.....	*155,400
Total	6,768,000	5,863,000	7,184,000	6,417,500	6,595,500	7,890,000	7,567,000	6,404,000	6,107,000	6,223,000	4,770,000	5,219,400
Aver.	218,000	209,000	232,000	214,000	213,000	263,000	244,000	207,000	204,000	200,000	159,000	168,000

*Daily averages computed from readings taken two or more days apart.

†Amount by planimeter. Clock stopped.

Total amount for 1921 = 77,008,400 gallons. Daily average = 211,000 gallons.

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APPENDIX XXI.

LITTLE RIVER WATER SUPPLY, SPRINGFIELD, MASS.

Operating Details of West Parish Filters—1921.

E. C. Cotton,
Superintendent.

FILTERS SCRAPED

MONTH	Number	Cubic Yards of Sand Removed			Depth in Inches		
		Maximum	Minimum	Average	Maximum	Minimum	Average
January....	2	245	105	175	3.5	1.5	2.5
February...	0	....	....	....	....	....	....
March.....	0	....	....	....	....	....	....
April.....	4	140	140	140	2.0	2.0	2.0
May.....	4	140	70	116	2.0	1.0	1.6
June.....	7	*1190	70	255	*17.0	1.0	3.6
July.....	6	1260	70	298	*18.0	1.0	4.3
August.....	1	105	105	105	1.5	1.5	1.5
September..	2	140	105	122	2.0	1.5	1.7
October....	4	105	105	105	1.5	1.5	1.5
November..	7	175	105	120	2.5	1.5	1.7
December..	1	105	105	105	1.5	1.5	1.5
Year...	38	*1260	70	175	*18.0	1.0	2.5

FILTER RUNS AFTER SCRAPINGS

MONTH	Number ending in	Million Gallons Filtered			Duration in Days		
		Maximum	Minimum	Average	Maximum	Minimum	Average
January....	3	95.21	63.95	80.12	43	30	37
February...	0	....	....	....	....	....	....
March.....	5	247.46	107.57	165.40	99	54	74
April.....	0	....	....	....	....	....	....
May.....	5	74.64	50.09	66.68	32	25	28
June.....	4	56.56	53.04	55.14	24	19	21
July.....	6	67.57	35.66	47.66	22	14	17
August.....	4	98.83	84.95	91.34	45	34	39
September..	2	152.82	98.98	125.90	63	40	52
October....	5	118.46	32.08	63.88	42	14	25
November..	4	106.27	39.82	64.08	42	17	38
December..	4	78.38	65.31	70.14	33	27	30
Year...	42	247.46	32.08	80.49	99	14	35

*The sand was wholly removed and washed in filters Nos. 3 and 4.

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Operating Details of West Parish Filters—1921—Concluded.

FILTER RUNS AFTER RAKINGS

MONTH	Number ending in	Million Gallons Filtered			Duration in Days		
		Maximum	Minimum	Average	Maximum	Minimum	Average
January	0	....	....	....	....	....	....
February	0	....	....	....	....	....	....
March	0	....	....	....	....	....	....
April	4	119.93	78.74	93.31	62	33	44
May	2	112.54	86.50	99.52	49	43	46
June	4	60.21	39.46	50.67	29	18	22
July	0	....	....	....	....	....	....
August	0	....	....	....	....	....	....
September	2	72.66	57.66	65.16	27	24	25
October	3	81.03	39.29	66.48	39	19	30
November	4	54.96	45.75	50.15	28	21	29
December	1	57.78	57.78	57.78	33	33	33
Year	20	119.93	39.29	68.15	62	18	32

FILTERS RESANDED

NUMBER	Cubic Yards of Sand Replaced			Depth in Inches		
	Maximum	Minimum	Average	Maximum	Minimum	Average
*2	3080	3080	3080	44	44	44

*The sand was wholly removed and washed in Filters Nos. 3 and 4.

MILLIONS OF GALLONS		Per Cent To Sand Washer
Filtered	To Sand Washer	
4684.12	22.45	0.48

COST PER MILLION GALLONS DELIVERED TO CITY

	Supervision and Laboratory	Sand Handling	Coagulant	Grounds and Buildings	Equipment	Miscellaneous	Decrease in Inventory	Total
Labor	$1.17	$1.08	$0.41	$2.08	$1.02	$0.20	....	$5.96
Materials	.11	.19	1.03	.26	.49	.08	+$0.27	2.43
Total	$1.28	$1.27	$1.44	$2.34	$1.51	$0.28	+$0.27	$8.39

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APPENDIX XXII.

LITTLE RIVER WATER SUPPLY,
SPRINGFIELD, MASS.

E. C. COTTON, Superintendent.

OPERATING COSTS OF WEST PARISH FILTERS — 1921.

CLASSIFICATION.	JAN.	FEB.	MAR.	APRIL.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	YEARLY TOTALS.
Care of,—													
Grounds,	$364.70	$533.20	$617.40	$575.00	$495.75	$228.00	$412.00	$374.50	$334.50	$433.02	$144.25	$185.75	$4,698.07
Buildings,	19.20	158.40	274.80	205.60	190.00	16.50	28.50	156.75	438.50	129.75	100.00	22.00	1,740.00
Equipment,	269.90	150.60	400.60	344.80	188.75	253.25	247.25	239.25	177.00	341.25	206.75	194.00	3,013.40
Miscellaneous,	.....	.....	.....	.....	38.00	18.00	.....	.....	.....	.....	40.00	.....	96.00
Chemist,	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	1,800.00
Supervision,	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	1,800.00
Laboratory,	115.20	105.60	120.00	136.80	105.60	105.60	132.00	105.60	105.60	132.00	105.60	132.00	1,401.60
Coagulant,—													
Hauling,	.....	.....	.....	.....	.....	.....	.....	40.00	.....	.....	8.00	.....	48.00
Storing,	.....	.....	.....	.....	.....	.....	.....	72.00	.....	.....	23.00	.....	95.00
Manufacturing,	115.40	238.70	63.60	74.40	118.00	135.00	188.00	127.50	48.00	132.50	93.00	196.00	1,530.10
Stableman,	115.20	115.20	115.20	129.60	96.00	96.00	120.00	96.00	96.00	120.00	96.00	120.00	1,315.20
Watchmen,	201.60	216.00	201.60	287.30	182.00	182.00	227.50	182.00	182.00	227.50	182.00	227.50	2,449.00
Ice Harvest,	272.40	28.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	301.20
Vacation Pay Roll,	115.20	217.20	86.40	28.80	.....	.....	.....	.....	.....	18.00	9.00	72.00	546.60
Total,	$1,888.80	$2,063.70	$2,179.60	$2,032.30	$1,714.10	$1,334.35	$1,655.25	$1,693.60	$1,681.60	$1,834.02	$1,307.60	$1,449.25	$20,884.17
Filter No. 1,—													
Cleaning,	.....	.....	$14.40	$77.50	$61.00	$20.00	$89.00	$14.25	$52.50	$10.68	$27.37	$106.50	$473.20
Resanding,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Filter No. 2,—													
Cleaning,	$145.00	.....	14.40	73.50	82.50	42.25	316.00	73.00	.....	106.37	24.50	85.00	962.52
Resanding,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Filter No. 3,—													
Cleaning,	.....	.....	12.00	.....	69.25	67.75	123.75	.....	.....	20.25	75.00	10.25	378.25
Resanding,	.....	.....	.....	.....	.....	.....	581.50	28.00	.....	.....	.....	.....	609.50
Filter No. 4,—													
Cleaning,	87.00	.....	14.40	79.50	28.50	309.50	.....	.....	14.25	62.75	57.63	14.25	667.78
Resanding,	.....	.....	.....	.....	.....	319.00	285.50	.....	.....	.....	.....	.....	604.50
Filter No. 5,—													
Cleaning,	.....	$16.90	.....	89.40	16.25	99.50	77.00	16.25	.....	89.68	97.25	14.00	516.23
Resanding,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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Filter No. 6,—													
Cleaning,.....	.....	.....	16.20	.....	84.00	12.75	123.19	14.00	55.25	.....	85.00	12.25	402.64
Resanding,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Total Pay Rolls,	$2,120.80	$2,080.60	$2,251.00	$2,352.20	$2,055.60	$2,205.10	$3,251.19	$1,839.10	$1,808.60	$2,123.75	$1,674.35	$1,691.50	$27,993.67
Bills for Mdse. Bought,—													
Grounds and Buildings,....	$64.20	$86.25	$314.65	$29.49	$377.04	$117.84	$30.00	$9.00	$53.99	$96.65	$9.40	$17.30	$1,205.81
Freight and Express,.....	2.26	1.63	1.21	.84	.....	.....	1.60	.....	.69	1.88	2.62	.....	12.73
Coagulant,.....	.....	1,590.85	228.79	307.74	5.25	.....	1,974.87	49.50	61.74	55.57	528.60	58.50	4,861.41
Taxes,.....	.....	.....	.....	.....	.....	.....	.....	.....	100.33	.....	.....	.....	100.33
Stock and Tools,	16.00	.....	30.23	18.09	8.00	70.20	219.79	1.20	25.95	18.00	.83	33.53	441.82
Sand Washer, Hose, Valves, Fittings,.....	.....	21.88	91.96	.....	.....	114.12	94.10	39.57	.....	.....	12.78	.....	374.41
Laboratory Supplies,.....	50.04	174.84	63.74	44.19	20.25	.....	45.64	.....	33.40	21.42	12.04	41.60	507.16
Live Stock Account,.....	29.40	39.70	38.95	36.75	65.30	43.85	1.60	34.10	20.90	63.90	41.90	31.85	448.20
Repairs to Equipment,...	.65	6.70	62.19	58.23	22.20	87.27	36.43	4.50	15.75	70.21	21.33	29.25	414.71
Auto Account,..	73.30	18.68	142.91	138.15	110.78	84.43	51.47	13.21	158.57	84.08	57.85	48.15	981.58
N. E. Telephone,	19.30	18.80	20.30	.....	.....	81.80	.....	40.50	.....	40.75	20.05	.....	241.00
Miscellaneous,'..	.....	.....	9.22	2.10	.....	.....	30.25	.....	.....	1.00	2.17	2.00	46.74
Oil and Gasoline for Pump,....	.....	.....	.....	.....	.....	127.50	136.50	135.00	.....	.....	102.60	.....	501.60
Total of Bills,	$255.15	$1,959.33	$1,004.15	$635.58	$608.82	$726.51	$2,622.25	$326.58	$471.32	$453.46	$812.17	$262.18	$10,137.50
Grand Total, Pay Rolls* and Bills,.	$2,588.03	$4,247.99	$3,480.25	$3,223.00	$2,869.98	$3,152.12	$6,198.56	$2,849.59	$2,455.28	$2,789.58	$2,653.96	$2,122.83	$38,131.17
Million Gallons as Metered at Provin Mountain,...	379.57	345.49	372.24	356.41	388.12	418.81	409.03	406.18	433.44	412.80	385.56	391.04	4,698.69

Total Bills and Pay Rolls*,.....	$38,131.17
Decrease in Inventory,.....	1,287.59
Net Total Cost of Filter Operations—1921,.....	$39,418.76
Net Total Cost of Plant and Accessories,.....	$847,330.00
Interest at 4%,.....	$13,893.20
Total Cost of Operation, including Interest,.....	$53,311.96

*Includes 10% added to Pay Roll Account to cover all overhead.

Net Cost per Million Gallons Delivered to City, Operation and Maintenance only,.....	$8.39
Cost, including Operation, Maintenance and Interest, per Million Gallons,.....	$11.35
Cost per Million Gallons, Exclusive of Charges on Grounds, Buildings, Autos, and Stable,.....	$6.18

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APPENDIX XXIII.

MUNICIPAL WATER WORKS, SPRINGFIELD, MASS.

TABLE OF RAINFALL—1921.

IN INCHES.

Location	Borden Brook Reservoir, Granville	West Parish Filters, Westfield	Provin Mountain Reservoir, Agawam	Administration Building, Springfield	U. S. Armory, Springfield	Ludlow Reservoir	
						Gate House, Ludlow	Filters, Ludlow
Records by—	Care taker, S.W.W.	Superintendent, S.W.W.	Care taker, S.W.W.	City Engineer	U. S. A. Post Hospital	Care taker, S.W.W.	Care taker, S.W.W.
January,.....	2.31	2.73	2.94	2.42	3.56	2.42	2.34
February,.....	3.78	4.23	3.16	1.48	2.80	1.83	1.67
March,.....	4.64	4.36	4.29	3.15	3.04	3.02	3.16
April,.....	4.42	4.64	4.33	3.56	2.68	3.58	3.71
May,.....	1.91	2.42	2.45	2.58	1.95	2.73	3.08
June,.....	4.20	3.09	3.62	2.96	2.90	3.07	3.27
July,.....	3.43	4.85	6.12	5.74	7.69	3.69	4.26
August,.....	3.88	2.99	2.98	1.95	3.72	1.62	1.88
September,.....	2.74	2.58	2.30	1.51	2.06	1.78	2.09
October,.....	1.66	1.53	1.44	1.88	1.62	1.70	1.88
November,.....	7.12	6.88	6.41	5.13	7.04	3.77	3.85
December,.....	2.26	2.20	2.56	2.15	1.68	2.06	2.19
Totals,.....	42.35	42.50	42.60	34.51	40.74	31.27	33.38
Mean,.....	3.53	3.54	3.55	2.88	3.40	2.61	2.78

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STREETS AND ENGINEERING

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REPORT

OF THE

DEPARTMENT OF STREETS AND ENGINEERING

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1921.

ADMINISTRATIVE

SPRINGFIELD, MASS., December 30, 1921.

To the Honorable City Council:—

The annual report of the Department of Streets and Engineering as required by the provision of Chapter 19, Section 5, of the Revised Ordinances is herewith submitted for your consideration.

The past year has been unusual in that for a full twelve-month period construction work has been carried forward without let-up, thus providing relief for a large number of men unable to find employment. An analysis of detailed reports of the divisions of this department is of interest, disclosing a record of work done, never before equaled in the history of this department.

It has been possible to practice economies in the purchase of materials and equipment and in the methods of operation; and, with the greater efficiency of labor, much has been accomplished in the process of readjustment.

The work of the Street Division invites attention. Highways have been maintained with less complaint than ever before; improved methods of construction, closer attention to repairs, better facilities for the handling of bituminous materials with modern equipment for the application of same, have all helped to produce results which place your city in an enviable position as regards the general condition of its streets.

Proper application of varying grades of road oils has not only pre-

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vented dust, but assisted materially in the maintenance of the street surface. The washing of highways by motor apparatus has been highly successful and is undoubtedly the most satisfactory and economical method of cleaning certain types of smooth pavements. I would recommend the purchase of an additional street flushing machine for next season.

Sewer construction has been advanced to a remarkable degree during 1921. The recognition by your honorable body of the needs of this department, with an increased appropriation, has resulted in a construction program more than double that of any previous year. Much money has been saved in operation, handling of materials, and general construction. The establishment of our pipe storage yard has made it possible to carry on work without delay.

I most earnestly recommend that generous appropriation be provided for sewer construction, as, with the constantly increasing areas of hard surface pavements, the need of the completion of the storm water sewer program is apparent.

Springfield is to be congratulated on having adopted the present method of collection and disposal of waste materials. No other branch of this department requires or receives the close attention which this department needs. "Service First" policy has resulted in regular, systematic, and efficient collection and deliveries. Recorded complaints in this office prove conclusively that this division is giving the public satisfactory service. Existing contracts for the disposal of the collected garbage and paper have been of great value to the city during the past year.

The Engineering department has kept pace with the increased activities of the year and rendered valuable service. Regular and systematic inspection of all the city's bridges has been maintained throughout the year. Much valuable information has been collected and recorded for future need. The increased efficiency of the Engineering Division is worthy of your attention.

The Street Lighting Division has accomplished much this year in the way of new installation and this city is now one of the best lighted cities of its size in the country. The existing contract is a most advantageous one for the city and gives Springfield one of the lowest rates in existence in municipal lighting. I desire to acknowledge the excellence of the service rendered, and the fullest co-operation of the officials of the United Electric Light Co. with this department.

In conclusion I desire to express my appreciation to the deputy heads of the divisions of this department, and their assistants, for their loyalty to the city's interests, for their whole-hearted co-operation and assistance

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in meeting the many problems of this office, and to give to them the fullest measure of credit for the results obtained in their work.

It has been my pleasure to serve under a board of supervisors which has been progressive, fearless, broad minded, and sympathetic; mindful at all times of the city's needs. I thank Mayor Leonard, Alderman R. B. Shattuck, and Councilman E. J. Erard for their helpful advice and support during the past year.

Respectfully submitted,

ROBERT P. MARSH,
Superintendent of Streets and Engineering.

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INVENTORY.

DEPARTMENT OF STREETS AND ENGINEERING, 1921.

Lands.

Location.	Area.	Value.
Abbe avenue, at crossing,	34,500 sq. ft.	$13,500.00
Ashes and Garbage Station, State street,	16 acres 13 rods	37,400.00
Birnie avenue extension, easterly side,	8,200 sq. ft.	1,300.00
Broadway, northwest corner Pynchon street,	3,803 sq. ft.	23,700.00
Broadway (School lot), northeast corner Pynchon street,	4,052 sq. ft.	26,300.00
Broadway (Adm. lot), southeast corner Vernon street,	3,547 sq. ft.	26,600.00
City Yard, Logan street,	43,324 sq. ft.	17,300.00
City Yard, east side Pecousic avenue,	95,447 sq. ft.	24,700.00
City Yard, west side Pecousic avenue,	55,056 sq. ft.	14,300.00
City Yard, Summer street,	83,611 sq. ft.	167,222.00
Emery Street Shop, corner Fulton (Dunn lot),	6,334 sq. ft.	8,320.00
Gravel Bank, Boston road,	22,869 sq. ft.	585.00
Gravel Bank, Five Mile Pond,	5.93 acres	5,850.00
Gravel Bank, Island Pond,	6 acres 71 rods	390.00
Longhill street dump,	2.25 acres	10,400.00
Trap Rock Quarry, Westfield,		3,744.00

Land Taken for Purpose of Widening Street but Not Yet Paid For.

Fulton street, east side, south corner Seventh,	1,871 sq. ft.
Fulton street, east side, north corner Auburn,	762 sq. ft.
Stafford street extension, J. J. Sullivan lot,	1,152 sq. ft.
Fulton street, corner Auburn, P. J. Mitchell lot,	1,743 sq. ft.

Salable Land.

Abbe avenue, Fisk avenue and B. & M. R. R. slopes,	25,353 sq. ft.	
Adams street, westerly corner Dwight street extension,	3,191 sq. ft.	1,400.00
67 Arch street,	4,976 sq. ft.	1,000.00
Broadway, G. A. R. lot,	88 sq. ft.	1,000.00
Carew street, at Eddy,	36,540 sq. ft.	1,000.00
Dwight street, Mack lot,	2 sq. ft.	26.00
Dwight street, north corner Sanford,	29 sq. ft.	260.00
Fulton street, Menard lot,	1,062 sq. ft.	2,080.00
Fulton street, Barrett lot,	1,134 sq. ft.	2,210.00
Fulton street, Connecticut River R. R. lot,	1,112 sq. ft.	2,210.00
Fulton street, King lot,	875 sq. ft.	1,690.00
Fulton street, Emery street shop yard (Phillips lot),	3,432 sq. ft.	6,700.00
Fulton street, Emery street shop yard (Beausang lot),	1,761 sq. ft.	3,450.00
Fulton street, Emery street shop yard, corner Clinton (Farrell lot),	2,359 sq. ft.	5,600.00
Fulton street, Haley lot,	1,009 sq. ft.	1,950.00

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Location.	Area.	Value.
Fulton street, Smith Realty Trust lot,	1,086 sq. ft.	$2,080.00
Fulton street, O'Connor lot,	1,233 sq. ft.	2,400.00
Fulton street, Treuchett lot,	1,228 sq. ft.	2,400.00
Fulton street, P. J. Mitchell lot,	4,400 sq. ft.	7,800.00
Fulton street, K. C. Mitchell lot,	644 sq. ft.	1,040.00
Fulton street, J. J. Mitchell lot,	601 sq. ft.	1,170.00
Fulton street, Flanagan lot,	2,701 sq. ft.	5,200.00
Locust street, rear lots 1, 4, 5, 6, 7, 8, 9,	21,275 sq. ft.	2,700.00
Locust street, northerly side, near Belmont avenue,	4,400 sq. ft.	390.00
Marble street, westerly corner Dwight street extension,	5,560 sq. ft.	2,600.00
Marble street, easterly corner Dwight street extension,	2,774 sq. ft.	1,300.00
Marshall street, Bailey lot,	1,785 sq. ft.	390.00
Marshall street, Lewis lot,	2,500 sq. ft.	450.00
Page boulevard, east side,	42 sq. ft.	6.00
Page boulevard, west side, corner Jennette street,	3,293 sq. ft.	520.00
Pecousic avenue, between Pecousic avenue and South street,	20,800 sq. ft.	2,600.00
Taylor street extension, south side Bemis street, F. M. West Box Co. lot,	6,069 sq. ft.	10,000.00
Taylor street extension, south side, F. M. West Box Co. lot,	2,225 sq. ft.	4,500.00
Taylor street extension, south side, F. M. West Box Co. lot,	1,116 sq. ft.	2,300.00
Taylor street extension, east side Alert street, Bondi lot,	225 sq. ft.	500.00
Taylor street extension, west side Spring street, McVeigh lot,	1,381 sq. ft.	2,800.00
Stafford street extension, north side, corner Cass, Greenburg lot,	111 sq. ft.	25.00
Stafford street extension, south side, near Cass street, Greenburg lot,	735 sq. ft.	130.00
		$465,488.00

BUILDINGS.

	Last Year.	This Year.
Emery street shop,	$23,400.00	$22,932.00
Logan street (incinerator),	25,000.00	24,500.00
Pecousic avenue, east side:		
Barn,	500.00	485.00
House,	800.00	776.00
Machine shop,	2,300.00	2,254.00
Sheds,	700.00	679.00
Pecousic avenue, west side:		
Stable,	18,000.00	17,640.00
Wagon shed,	2,000.00	1,960.00
State street:		
Dwelling,	1,200.00	1,164.00
Barn,	700.00	679.00
Storehouse,	1,700.00	1,649.00

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	Last Year.	This Year.
Sheds,	$100.00	$97.00
Garbage plant,	22,000.00	21,560.00
Summer street:		
Shed,	700.00	679.00
Asphalt plant building,	3,000.00	2,940.00
Barn,	8,000.00	7,840.00
Office,	1,000.00	980.00
Garage,	21,600.00	21,168.00
Shed,	900.00	873.00
Dwelling,	1,000.00	970.00
Trap rock bin and trestle,	25,452.00	24,942.96
Cement shed and platform,	900.00	873.00
West end incinerator,	7,000.00	Torn down
Total,		$157,640.96
Land,		$465,488.00
Buildings,		157,640.96

EQUIPMENT.

Paint shop,	$75.00	
Ashes and refuse disposal,	1,059.67	
Asphalt plant,	11,169.68	
Automobiles,	17,877.50	
Blacksmith shop,	1,077.48	
Carpenter shop,	734.87	
Concrete mixer,	3,913.97	
Engineering division,	4,540.05	
Garage,	1,340.55	
Harness and fittings,	1,669.36	
Highway and road machinery,	3,176.47	
Horses,	9,025.00	
Laboratory,	458.51	
Machine shop,	1,257.04	
Merg plant,	5,710.50	
Motorcycles,	287.50	
Motor trucks,	44,796.70	
Motor truck equipment,	2,514.70	
Office furniture, etc.,	3,905.73	
Patterns,	724.12	
Sewer equipment,	1,323.30	
Sleighs and sleds,	2,120.00	
Stables and yards,	22,608.79	
Steam rollers,	16,706.56	
Steam shovel,	5,094.14	
Street cleaning,	2,280.78	
Street lighting,	1,134.68	
Tractor,	3,604.00	
Wagons and carts,	7,389.08	
Watering carts,	524.04	
		$178,099.77

SMALL TOOLS AND PERISHABLE EQUIPMENT.

Small tools and perishable equipment,	$16,680.70

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SUPPLIES AND MATERIALS.

Supplies and materials:		
Stores No. 1,	$28,296.31	
Stores No. 2,	9,352.99	
Stores No. 3,	297.75	
Miscellaneous stores,	8,685.27	
Asphalt stores,	1,474.82	
Car tickets,	23.50	
		$48,130.64

RECAPITULATION.

Lands,	$465,488.00
Buildings,	157,640.96
Equipment,	178,099.77
Small tools and perishable equipment,	16,680.70
Supplies and materials,	48,130.64
Grand total,	$866,040.07

RECONCILIATION OF "EXPENDITURES FROM APPROPRIATIONS" TO AMOUNT OF "COST OF WORK PERFORMED."

"Cost of Work Performed" as per statement,		$1,748,832.69
Deduct		
Charge for "Depreciation of Equipment" not included in charges against appropriation,	$36,456.86	
Overhead over-applied,	45,982.78	
Material taken from stores unaccounted for,	183.23	
Expenditures for "Capital Accounts" not re-appropriated,	21,771.81	
		104,394.68
		$1,644,438.01
Add		
Purchase and manufacture of equipment,	$47,558.59	
Purchase and manufacture of small tools,	16,702.69	
		64,261.28
		$1,708,699.29

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STATEMENT OF EXPENDITURES FROM APPROPRIATIONS.

Title of Account.	Original Appropriation.	Credit Transfers.	Debit Transfers.	Total Amount Available.	Expended.	Unexpended Balance.	Encumbrances.	Unencumbered Balance.
Administration,	$36,859.00	$104.67	$3,180.07	$39,934.40	$39,042.05	$892.35	$237.65	$654.70
Bridges,	36,740.00	8,505.00	4,699.31	32,934.31	25,824.88	7,109.43	154.75	6,954.68
Street Cleaning,	136,005.00	175.00	17,725.00	153,555.00	151,960.84	1,594.16	.....	1,594.16
Engineering,	34,596.00	225.00	225.00	34,596.00	34,267.81	328.19	10.00	318.19
Garbage,	50,150.00	1,000.00	.....	49,150.00	41,998.34	7,151.66	.....	7,151.66
Highways,	387,000.00	5,500.00	95,028.04	476,528.94	466,477.85	10,051.09	1,100.81	8,950.28
Street Sprinkling,	14,505.00	1,575.00	75.00	13,005.00	11,863.44	1,141.56	.....	1,141.56
Street Lighting,	152,705.00	.....	.....	152,705.00	148,586.94	4,118.06	39.40	4,078.66
Street Oiling,	33,075.00	4,000.00	6,000.00	35,075.00	34,772.97	302.03	.....	302.03
Repair Shop,	34,050.00	75.00	4,875.00	38,850.00	36,845.32	2,004.68	4.25	2,000.43
Ashes and Rubbish,	167,270.00	7,000.00	.....	160,270.00	152,296.97	7,973.03	.....	7,973.03
Sewers,	85,000.00	1,150.00	220,299.75	304,149.75	296,363.52	7,786.23	645.00	7,141.23
Sidewalks,	54,200.00	.....	17,036.67	71,236.67	68,894.88	2,341.79	.....	2,341.79
Stables and Yards,	202,580.00	2,362.00	24,650.92	224,868.92	199,503.48	25,365.44	537.46	24,827.98
WS-215,	91,434.36	2,482.25	4,926.27	93,878.38	45,194.37	48,684.01	6,465.35	42,218.66
Credits available for reappropriation,	.....	303,338.26	307,838.68	4,500.42	.....	4,500.42	.....	4,500.42
Total,	$1,516,169.36	$337,492.18	$706,560.61	$1,885,237.79	$1,753,893.66	$131,344.13	$9,194.67	$122,149.46

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SPECIAL AND BOND ISSUE ACCOUNTS.

Title of Account.	Appropriations.	Credit Transfers.	Debit Transfers.	Total Amount Available.	Expended on Construction.	Expended on Land Damages.	Total Expended.	Unexpended Balance.
Dwight Street Underpass,	$77,005.05	.....	.....	$77,005.05	.....	$75,042.50	$75,042.50	$1,962.55
Dwight Street Widening,	235,624.23	.....	.....	235,624.23	.....	234,609.93	234,609.93	1,014.30
Indian Orchard Bridge,	30,000.00	.....	.....	30,000.00	$26,459.48	.....	26,459.48	3,540.52
Pearl Street Widening,	24,000.00	.....	.....	24,000.00	2,061.27	21,213.12	23,274.39	725.61
Sewer Construction,	225,000.00	.....	.....	225,000.00	224,971.65	.....	224,971.65	28.35
Surface Sewer,	3,609.43	.....	.....	3,609.43	3,609.43	.....	3,609.43	.....
South End Bridge,	50,000.00	.....	.....	50,000.00	1,379.05	.....	1,379.05	48,620.95
Stafford Street Extension,	50,000.00	.....	.....	50,000.00	36,408.65	10,175.00	46,583.65	3,416.35
Taylor Street Extension,	200,000.00	.....	.....	200,000.00	11,565.18	108,279.56	119,844.74	80,155.26
Water Street Underpass,	181,079.81	.....	.....	181,079.81	.....	175,092.50	175,092.50	5,987.31
Water Street Widening,	24,975.00	.....	.....	24,975.00	.....	246.50	246.50	24,728.50

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CLASSIFICATION OF EXPENSE.

SEWERS.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
CONSTRUCTION. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Vitrified clay pipe,	$26,357.24	$1,956.78	$14,594.20	$484.36	$5,486.12	.....	$958.75	$52.50	.....	$1,314.44	$51,204.39	.....	.....
Wellholes,	321.91	57.14	382.36	.....	95.80	.....	21.80	.....	.....	15.02	894.03	.....	.....
Manholes,	6.42	.....	33.40	.....	4.81	.....	.....	.....	.....	.27	44.90	.....	.....
Flush gates,	.....	.....	.....	458.41	55.02	.....	.....	.....	.....	.....	513.43	.....	.....
Total costs,	$26,685.57	$2,013.92	$15,009.96	$942.77	$5,641.75	.....	$980.55	$52.50	.....	$1,329.73	$52,656.75	.....	.....
MAINTENANCE, REPAIRING. CITY COST.													
Vitrified clay pipe,	$628.66	$117.58	$131.14	.....	$120.00	.....	$86.70	$4.50	.....	$31.40	$1,119.98	.....	.....
Brick,	23.25	5.75	7.60	.....	4.68	.....	1.50	.....	.....	.93	43.71	.....	.....
Concrete,	.....	.....	13.26	.....	1.59	.....	.....	.....	.....	.....	14.85	.....	.....
Manholes,	387.64	113.65	484.22	.....	126.04	$0.44	46.86	.....	.....	17.67	1,176.52	.....	.....
Wellholes,	1,380.50	250.11	1,868.34	.....	446.29	2.64	147.85	6.00	.....	65.17	4,166.90	.....	.....
Flush gates,	.....	.....	.....	$592.85	71.09	.....	.....	.....	.....	.....	663.94	.....	.....
Total cost,	$2,420.05	$487.09	$2,504.56	$592.85	$769.69	$3.08	$282.91	$10.50	.....	$115.17	$7,185.90	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Wellholes,	$12.96	.....	$9.32	.....	$3.10	.....	$3.00	.....	.....	$0.60	$28.98	.....	.....
Private drains, construction,	5,999.29	$229.46	2,826.01	.....	1,173.85	.....	352.11	$61.50	.....	316.33	10,958.55	.....	.....
Repairing and relaying,	375.30	16.95	108.46	.....	69.88	.....	48.00	15.00	.....	18.86	652.45	.....	.....
Construction to curb or special work,	100.25	3.00	35.37	.....	18.38	.....	9.25	.....	.....	5.24	171.49	.....	.....
Cleaning private drains,	195.19	4.33	4.61	.....	30.94	.....	44.40	.....	.....	9.75	289.22	.....	.....
Total cost,	$6,682.99	$253.74	$2,983.77	.....	$1,296.15	.....	$456.76	$76.50	.....	$350.78	$12,100.69	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

SEWERS—Continued.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
MAINTENANCE, FLUSHING.													
Total costs,	$3,758.84	.....	$0.43	.....	$720.77	$1,777.82	$298.40	.....	.....	$170.99	$6,727.25	.....	.....
MAINTENANCE, CLEANING.													
Vitrified clay pipe,	$2,297.83	$498.69	$2.21	.....	$369.06	.....	$167.90	.....	.....	$108.62	$3,444.31	.....	.....
Brick,	1,877.32	339.76	1.73	.....	277.83	.....	9.00	.....	.....	87.51	2,593.15	.....	.....
Outlets,	207.42	.....	.....	.....	26.95	.....	6.50	.....	.....	10.77	251.64	.....	.....
Total cost,	$4,382.57	$838.45	$3.94	.....	$673.84	.....	$183.40	.....	.....	$206.90	$6,289.10	.....	.....
MAINTENANCE,													
Miscellaneous,	$605.23	$72.20	$144.05	$84.87	$121.68	.....	$77.00	.....	.....	$30.75	$1,135.78	.....	.....
Total cost,	$605.23	$72.20	$144.05	$84.87	$121.68	.....	$77.00	.....	.....	$30.75	$1,135.78	.....	.....
Grand total, Sewers,	$44,535.25	$3,665.40	$20,646.71	$1,620.49	$9,223.88	$1,780.90	$2,279.02	$139.50	.....	$2,204.32	$86,095.47	.....	.....
GARBAGE DISPOSAL.													
												lbs.	
Garbage collection,	$36,910.31	.....	.....	$1,400.36	$7,153.02	$19,470.02	$2.30	.....	.....	$1,825.94	$66,761.95	30,432,263	$0.0021
Garbage disposal,	1,694.08	.....	.....	.....	211.42	.....	.....	.....	.....	67.68	1,973.18	.....	.....
Total cost,	$38,604.39	.....	.....	$1,400.36	$7,364.44	$19,470.02	$2.30	.....	.....	$1,893.62	$68,735.13	.....	.....

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CLASSIFICATION OF EXPENSE. *Continued.*

ASHES AND REFUSE DISPOSAL.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
												Loads.	
Ashes	$91,493.54	$13,083.96	.....	$2,799.68	$15,379.61	$15,732.32	$751.45	.....	.....	$4,302.93	$148,543.54	35,777	$4.012
Maintenance of dumps	6,331.40	196.90	.....	.....	821.86	.....	.50	.....	.....	320.33	7,670.99	.....	.....
Refuse	29,703.50	2,703.20	.....	.....	4,890.76	6,841.43	8.00	.....	$15.00	1,485.33	45,647.21	8,534	5.355
Logan street incinerator	.....	.....	.....	900.02	108.00	.....	.....	.....	.....	.....	1,008.02	.....	.....
Total cost	$127,528.44	$15,984.06	.....	$3,699.70	$21,200.23	$22,573.75	$759.95	.....	$15.00	$6,108.66	$197,869.76	.....	.....
Grand total, Ashes, Refuse, and Garbage Disposal	$166,132.83	$15,984.06	.....	$5,100.06	$28,564.67	$42,048.77	$762.25	.....	$15.00	$8,002.25	$266,604.39	.....	.....

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CLASSIFICATION OF EXPENSE—*Continued.*

HIGHWAYS.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
CONSTRUCTION. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Bituminous macadam,....	$35,296.67	$30,356.66	$52,485.65	$72.80	$15,341.94	.....	$2,886.85	$4,720.75	$212.50	$1,817.58	$143,191.40	.....	.....
Granite block,.....	8,066.72	1,879.97	17,630.79	1.50	3,403.80	.....	36.15	66.00	264.10	419.82	31,768.85	.....	.....
Cinders,.....	8,561.63	6,039.43	344.75	.....	1,937.16	.....	481.95	.....	288.75	426.45	18,080.12	.....	.....
Gravel,.....	3,035.24	692.70	202.22	37.66	537.59	.....	260.10	.....	86.25	165.80	5,017.56	.....	.....
Asphalt,.....	7,351.47	2,584.27	11,885.40	35.82	2,753.67	.....	253.48	279.00	174.30	383.52	25,700.93	.....	.....
Total cost,.....	$62,311.73	$41,553.03	$82,548.81	$147.78	$23,974.16	.....	$3,918.53	$5,065.75	$1,025.90	$3,213.17	$223,758.86	.....	.....
MAINTENANCE. CITY COST.													
Water-bound macadam,...	$4,340.17	$3,031.27	$4,638.51	.....	$1,561.53	$2.26	$338.80	$443.25	.....	$218.49	$14,574.28	.....	.....
Bituminous concrete,.....	5,575.83	1,384.79	10,223.96	.....	2,212.45	.....	449.95	521.25	.....	281.48	20,649.71	.....	.....
Bituminous macadam,....	22,189.36	14,318.92	34,676.19	$6.50	9,417.56	157.38	2,177.86	3,820.50	.....	1,133.03	87,897.30	.....	.....
Wood block,.....	3,508.31	743.48	3,370.61	132.80	978.25	7.33	220.45	.....	.....	169.08	9,130.31	.....	.....
Granite block,.....	1,432.94	321.30	296.35	.....	256.08	.....	9.10	.....	.....	74.45	2,390.22	.....	.....
Brick,.....	2,098.06	541.55	697.50	17.29	418.31	1.76	6.30	19.50	.....	103.84	3,904.11	.....	.....
Bitulithic,.....	540.60	110.00	441.27	.....	149.08	.....	21.05	103.50	.....	26.05	1,391.55	.....	.....
Hassam,.....	216.60	171.31	486.14	.....	112.68	.....	38.25	15.00	.....	11.73	1,051.71	.....	.....
Gravel,.....	12,668.38	6,595.96	9,679.74	.....	3,745.72	.....	1,250.95	379.50	.....	639.64	34,959.89	.....	.....
Fences,.....	3,021.42	123.67	609.67	58.63	528.45	.....	449.75	.....	.....	140.50	4,932.09	.....	.....
Asphalt,.....	11,495.57	3,983.50	38,943.72	.....	6,864.03	.....	1,094.35	1,079.25	.....	604.02	64,064.44	.....	.....
Miscellaneous,.....	1,647.25	13.00	227.13	200.50	389.11	7.65	1,065.27	.....	.....	81.68	3,631.59	.....	.....
Mixed concrete,.....	253.85	58.65	104.19	.....	56.53	.....	41.70	.....	.....	12.69	527.61	.....	.....
Street signs,.....	2,595.88	.....	233.33	652.63	492.70	11.88	506.85	.....	.....	105.11	4,598.38	.....	.....
Culvert,.....	65.73	.....	37.65	.....	13.21	.....	3.25	.....	.....	3.43	123.27	.....	.....
Total cost,.....	$71,649.95	$31,397.40	$104,665.96	$1,068.35	$27,195.69	$188.26	$7,673.88	$6,381.75	.....	$3,605.22	$253,826.46	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

HIGHWAYS—Continued.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
MAINTENANCE.													
ASSESSABLE COST.													
Water-bound macadam,	$656.44	$221.05	$293.49	.....	$170.23	.....	.....	$217.50	.....	$31.72	$1,590.43	.....	.....
Bituminous concrete,	16.32	9.20	1.27	.....	8.31	.....	.....	.....	.....	.78	30.88	.....	.....
Bituminous macadam,	4,457.71	1,341.76	6,713.58	$42.00	1,702.07	.....	$581.95	838.50	.....	209.86	15,887.43	.....	.....
Wood block,	1,250.27	435.45	1,886.39	.....	436.15	.....	1.35	.....	.....	60.78	4,070.39	.....	.....
Granite block,	1,912.54	352.84	841.80	.....	385.54	.....	8.80	.....	$2.00	94.96	3,598.48	.....	.....
Brick,	717.77	218.45	202.50	.....	140.98	.....	.....	.....	.....	36.12	1,315.82	.....	.....
Bitulithic,	362.70	117.20	461.61	.....	116.90	.....	4.90	9.00	.....	18.81	1,091.12	.....	.....
Hassam,	1,520.74	188.49	1,876.15	.....	454.75	.....	28.30	.....	94.50	81.51	4,244.44	.....	.....
Gravel,	165.35	86.49	55.00	.....	44.20	.....	2.10	51.00	.....	8.40	412.54	.....	.....
Asphalt,	305.41	102.69	961.46	.....	177.98	.....	41.13	49.50	7.20	15.74	1,661.11	.....	.....
Mixed concrete,	6.60	2.00	2.19	.....	1.34	.....	.....	.....	.....	.36	12.49	.....	.....
Miscellaneous,	1.95	.....	.....	.....	.24	.....	.....	.....	.....	.09	2.28	.....	.....
Total cost,	$11,373.80	$3,075.62	$13,295.44	$42.00	$3,633.69	.....	$668.53	$1,165.50	$103.70	$559.18	$33,917.41	.....	.....
Grand total, Highways,	$145,335.48	$76,026.05	$200,510.21	$1,258.13	$54,803.54	$188.26	$12,260.94	$12,613.00	$1,129.60	$7,377.52	$511,502.73	.....	.....
SIDEWALKS AND CURBING.													
CONSTRUCTION.													
CITY COST.													
Concrete walks,	$442.32	$107.92	$216.91	.....	$97.76	.....	$2.80	.....	$22.80	$22.56	$912.57	.....	.....
Granite curb,	13,463.64	2,098.05	2,231.74	.....	2,248.94	.....	55.65	.....	.....	695.12	20,793.14	.....	.....
Cinder walks,	571.74	209.30	.06	.....	97.44	.....	2.00	.....	.....	28.92	909.46	.....	.....
Total cost,	$14,477.70	$2,415.27	$2,448.71	.....	$2,444.14	.....	$59.95	.....	$22.80	$746.60	$22,615.17	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

SIDEWALKS AND CURBING.—Continued.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
CONSTRUCTION. ASSESSABLE COST.													
Concrete walks,	$4,309.02	$1,391.72	$3,533.38	.....	$1,165.23	.....	$33.50	.....	$224.40	$218.31	$10,875.56	.....	.....
Granite curb,	1,041.13	957.45	18,739.46	.....	2,563.91	.....	19.35	.....	.....	53.56	23,374.86	.....	.....
Cinder walk,	379.09	59.60	44.81	$194.84	83.70	.....	.....	.....	.....	19.17	781.21	.....	.....
Total cost,	$5,729.24	$2,408.77	$22,317.65	$194.84	$3,812.84	.....	$52.85	.....	$224.40	$291.04	$35,031.63	.....	.....
MAINTENANCE. CITY COST.													
Concrete walks,	$670.77	$234.75	$365.34	.....	$157.49	.....	.....	.....	$10.80	$30.72	$1,469.87	.....	.....
Brick walks,	1,017.89	140.25	217.14	.....	222.76	$360.13	$14.05	.....	.....	50.81	2,079.03	.....	.....
Granite curb,	7,282.76	998.91	689.99	.....	1,182.78	.....	65.10	.....	33.00	370.49	10,573.03	.....	.....
Cinder walks,	22.77	.....	3.77	.....	5.13	.....	15.10	.....	.....	1.11	47.88	.....	.....
Drawing curb from jobs,	75.82	19.55	.....	.....	11.78	.....	.....	.....	.....	2.38	109.48	.....	.....
Sanding walks,	105.26	74.96	3.60	.....	22.61	.....	.....	.....	.....	4.67	211.10	.....	.....
Turfing tree belt,	877.89	295.15	3.26	.....	147.16	.....	5.60	.....	.....	44.46	1,373.52	.....	.....
Total cost,	$10,053.16	$1,763.57	$1,339.10	.....	$1,699.66	$360.13	$99.85	.....	$43.80	$504.64	$15,863.91	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Brick walks,	$4.60	$2.00	.....	.....	$0.82	.....	.....	.....	.....	$0.24	$7.66	.....	.....
Driveways,	452.09	166.80	$792.05	.....	171.87	.....	.....	.....	.....	22.87	1,605.68	.....	.....
Total cost,	$456.69	$168.80	$792.05	.....	$172.69	.....	.....	.....	.....	$23.11	$1,613.34	.....	.....
Grand total, Sidewalks and Curbing,	$30,716.79	$6,756.41	$26,897.51	$194.84	$8,129.33	$360.13	$212.65	.....	$291.00	$1,565.39	$75,124.05	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

BRIDGES.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
CONSTRUCTION. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
**Indian Orchard Bridge.													
Engineering,	$266.49	.....	.....	.....	$33.31	.....	.....	.....	.....	$11.07	$310.87	.....	.....
Renovating pier under bridge,	2,879.10	$53.43	$577.11	$353.14	526.01	.....	$338.60	.....	$39.60	142.51	4,909.50	.....	.....
Unloading lumber,	171.92	68.87	.....	.....	34.34	.....	36.75	.....	.....	8.63	320.51	.....	.....
Watching,	438.65	.....	.....	.....	55.36	.....	.....	.....	.....	22.65	516.66	.....	.....
Building temporary walk,	38.02	.....	31.42	.....	9.29	.....	6.00	.....	.....	1.95	86.68	.....	.....
Erecting and furnishing steel,	.....	.....	‡96.49	20,172.42	2,409.11	.....	.....	.....	.....	.....	22,485.04	.....	.....
Building deck,	627.38	150.45	150.67	101.45	183.98	.....	54.50	.....	.....	32.09	1,250.52	.....	.....
Total cost,	$4,421.56	$272.75	$662.71	$20,627.01	$3,201.40	.....	$435.85	.....	$39.60	$218.90	$29,879.78	.....	.....
MAINTENANCE. CITY COST.													
Abbe Avenue Bridge.													
Railings,	$12.24	.....	.....	.....	$1.53	.....	.....	.....	.....	$0.54	$14.31	.....	.....
Armory Street Bridge (N. Y.N.H.&H.R.R.).													
Roadway,	32.30	$8.00	$38.94	.....	9.71	.....	.....	.....	.....	1.67	90.62	.....	.....
Cottage Street Bridge.													
Redecking,	21.39	.....	20.84	.....	.52	.....	.....	.....	.....	1.17	43.92	.....	.....
*Cottage Street Bridge.													
Over Poor Brook,	1.45	.....	.....	.....	.48	.....	$2.50	.....	.....	.05	4.48	.....	.....
†Dwight Street Underpass.													
Painting,	3,284.98	.....	144.59	$876.45	551.64	.....	109.75	.....	.....	181.25	5,148.66	.....	.....
Ludlow Bridge.													
Roadway,	7.18	2.50	.20	.....	1.23	.....	.....	.....	.....	.38	11.49	.....	.....
Lighting lanterns,	22.62	.....	.....	3.75	3.26	.....	.....	.....	.....	.81	30.44	.....	.....
Engineering,	56.21	.....	.....	.....	7.01	.....	.....	.....	.....	2.22	65.44	.....	.....
Strengthening Reinforcements,	.....	.....	.....	487.00	.....	.....	.....	.....	.....	.....	487.00	.....	.....

**Chargeable to Capital Account. ‡Credit. *Continuation of 1920 work. †Work not completed in 1921.

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CLASSIFICATION OF EXPENSE.—*Continued.*

BRIDGES—Continued. MAINTENANCE. CITY COST.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
North End Bridge.													
Flush coating wood blocks,	$70.38	$63.90	$115.03	.....	$30.37	.....	.....	.....	.....	$3.78	$283.46	.....	.....
Cleaning,	20.89	.....	.....	.....	2.62	.....	.....	.....	.....	1.00	24.51	.....	.....
†Policing,	1,428.67	.....	.....	.....	181.93	.....	$1.75	.....	.....	85.64	1,697.99	.....	.....
Building temporary fence,	30.07	.....	22.49	.....	6.90	.....	4.00	.....	.....	.96	64.42	.....	.....
Cleaning lower cord,	366.89	.....	.....	.....	47.33	.....	8.50	.....	.....	19.05	441.77	.....	.....
Painting lower cord,	684.59	.....	‡28.07	$124.14	99.96	.....	14.00	.....	.....	38.37	932.99	.....	.....
Repairing,	18.98	.....	.....	100.00	16.03	.....	14.00	.....	.....	.62	149.63	.....	.....
Repairing sidewalk,	6.53	.....	.....	.....	.82	.....	.....	.....	.....	.33	7.68	.....	.....
Roadway,	394.88	18.00	128.56	114.73	86.25	.....	43.15	.....	.....	19.58	805.15	.....	.....
Old Toll Bridge.													
Roadway,	46.52	.....	35.18	.....	10.39	.....	3.00	.....	.....	1.96	97.05	.....	.....
Cleaning,	5.40	10.35	.....	.....	1.91	.....	.....	.....	.....	.18	17.84	.....	.....
Tightening bolts,	713.74	.....	75.54	2.65	104.75	.....	47.00	.....	.....	34.02	977.70	.....	.....
Watching,	3,830.45	.....	.....	41.08	492.34	.....	.....	.....	.....	231.39	4,595.26	.....	.....
Inspecting,	.....	.....	.....	43.66	.....	.....	.....	.....	.....	.....	43.66	.....	.....
Replacing floor timbers in new section,	39.99	.....	4.00	.....	6.58	.....	9.00	.....	.....	1.89	61.46	.....	.....
Renailing floor in new section,	37.60	.....	.....	25.50	7.78	.....	.....	.....	.....	1.80	72.68	.....	.....
Unloading lumber,	160.80	55.51	.....	.....	27.78	.....	6.38	.....	.....	8.78	259.25	.....	.....
Redecking old section,	686.93	88.00	‡206.48	1,139.39	209.80	.....	4.00	.....	.....	36.53	1,958.17	.....	.....
†Repairing,	639.74	18.00	66.10	223.76	123.12	.....	45.50	.....	.....	32.95	1,149.17	.....	.....
Page Boulevard Bridge.													
Building fence,	70.38	.....	22.95	13.38	14.51	.....	12.00	.....	.....	2.22	135.44	.....	.....
Pasco Road Bridge.													
Engineering,	4.09	.....	.....	.....	.51	.....	.....	.....	.....	.18	4.78	.....	.....
Closing roadway,	2.24	.....	.....	.....	.52	.....	2.00	.....	.....	.12	4.88	.....	.....
Replanking bridge,	97.28	6.00	‡17.16	166.84	31.95	.....	8.25	.....	.....	5.07	298.23	.....	.....
Red House Crossing.													
Repairing,	29.52	5.18	1.71	16.95	7.70	.....	9.50	.....	.....	1.33	71.89	.....	.....

†Work not completed in 1921. ‡Credit.

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CLASSIFICATION OF EXPENSE.—*Continued.*

BRIDGES—Continued.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
MAINTENANCE. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
South End Bridge.													
Roadway,	$157.83	$12.75	$91.20	.....	$35.06	.....	$22.50	.....	.....	$7.86	$327.20	.....	.....
Policing,	1,151.95	.....	.....	.....	146.64	.....	1.00	.....	.....	69.05	1,368.64	.....	.....
Repairing decking,	61.09	.....	72.08	.....	17.83	.....	13.50	.....	.....	1.97	166.42	.....	.....
Putting up warning signs,	4.40	.....	3.04	.....	.92	.....	.....	.....	.....	.24	8.60	.....	.....
††Engineering,	127.89	.....	.....	.....	15.97	.....	.....	.....	.....	5.22	149.08	.....	.....
‡Advertising for steel structural work,	.....	.....	.....	$275.40	.....	.....	.....	.....	.....	.....	275.40	.....	.....
††Removing old deck,	608.74	304.43	1.34	.....	121.02	.....	61.25	.....	.....	32.70	1,129.48	.....	.....
Examination,	.....	.....	.....	693.24	.....	.....	.....	.....	.....	.....	693.24	.....	.....
St. James Avenue (N.Y., N.H.&H.R.R.).													
Sidewalks,	30.64	.....	7.71	.....	5.20	.....	4.00	.....	.....	.96	48.51	.....	.....
St. James Avenue (B.&A.).													
Roadway,	3.97	.....	.60	.....	.57	.....	.....	.....	.....	.21	5.35	.....	.....
Sundry Bridges.													
Railings,	21.20	.....	2.91	.....	2.98	.....	.....	.....	.....	.78	27.87	.....	.....
Total cost,	$14,992.64	$592.62	$603.25	$4,347.92	$2,433.42	.....	$446.53	.....	.....	$834.83	$24,251.21	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Old Toll Bridge.													
Repairing break caused by Buehholz machine,	$29.41	.....	$4.47	.....	$4.36	.....	$1.00	.....	.....	$1.47	$40.71	.....	.....
Total cost,	$29.41	.....	$4.47	.....	$4.36	.....	$1.00	.....	.....	$1.47	$40.71	.....	.....
Grand total, Bridges,	$19,443.61	$865.37	$1,270.43	$24,974.93	$5,639.18	.....	$883.38	.....	$39.60	$1,055.20	$54,171.70	.....	.....

†Work not completed in 1921. ‡Capital Account.

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CLASSIFICATION OF EXPENSE.—*Continued.*

STREET CLEANING.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Patrol,	$58,079.43	$2,582.04	$96.70	$150.09	$8,051.79	$406.84	$2,501.71	.....	$194.00	$3,087.79	$75,149.89	.....	.....
Macadam,	42,564.80	8,157.89	.....	.....	6,619.96	1,956.57	199.15	.....	.....	2,288.08	61,786.45	.....	.....
Wellholes,	3,296.28	1,138.37	4.52	.....	577.65	.....	203.85	.....	.....	170.70	5,391.37	.....	.....
Gravel,	754.01	376.23	.....	.....	140.33	.....	.....	.....	.....	39.32	1,309.89	.....	.....
Machine,	250.52	40.50	.....	.....	36.71	.....	.....	.....	.....	14.88	342.61	.....	.....
Crosswalks,	250.85	11.49	.....	.....	32.82	.....	.....	.....	.....	11.13	306.29	.....	.....
Gutters,	431.13	92.59	.....	.....	65.23	.....	.....	.....	.....	19.85	608.80	.....	.....
Catch Basin,	19.04	8.50	.....	.....	3.43	.....	.....	.....	.....	1.02	31.99	.....	.....
Leaves,	410.83	196.50	.....	.....	75.76	.....	.....	.....	.....	23.98	707.07	.....	.....
Total cost,	$106,056.89	$12,604.11	$101.22	$150.09	$15,603.68	$2,362.91	$2,904.71	.....	$194.00	$5,656.75	$145,634.36	.....	.....
Sanding,	$568.25	$402.40	$557.59	$10.24	$215.54	$37.63	$191.12	.....	.....	$28.94	$2,011.71	.....	.....
Removal of snow and ice,	18,827.34	8,575.20	29.70	36.60	3,528.51	131.56	786.95	.....	$63.00	953.85	32,932.71	.....	.....
Total cost,	$19,395.59	$8,977.60	$587.29	$46.84	$3,744.05	$169.19	$978.07	.....	$63.00	$982.79	$34,944.42	.....	.....
Grand total, Street Cleaning,	$125,452.48	$21,581.71	$688.51	$196.93	$19,347.73	$2,532.10	$3,882.78	.....	$257.00	$6,639.54	$180,578.78	.....	.....
OILING STREET.													
MAINTENANCE. CITY COST.												sq. yds.	
Oil,	$684.81	$94.48	$4,566.07	$199.39	$781.49	.....	$931.55	.....	.....	$36.08	$7,293.82	1,690,132	$0.0043
Oil and sand,	7,887.09	4,135.74	17,523.13	.....	3,756.45	.....	1,345.15	.....	.....	412.65	35,060.21	2,125,423	.0164
Total cost,	$8,571.90	$4,230.22	$22,089.20	$199.39	$4,537.94	.....	$2,276.70	.....	.....	$448.68	$42,354.03	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Oil,	$34.14	.....	$348.10	.....	$54.78	.....	$72.50	.....	.....	$1.73	$511.25	.....	.....
Total cost,	$34.14	.....	$348.10	.....	$54.78	.....	$72.50	.....	.....	$1.73	$511.25	.....	.....
Grand total, Oiling Street,	$8,606.04	$4,230.22	$22,437.30	$199.39	$4,592.72	.....	$2,349.20	.....	.....	$450.41	$42,865.28	.....	.....

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CLASSIFICATION OF EXPENSE.

SEWERS.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
CONSTRUCTION. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Vitrified clay pipe,	$26,357.24	$1,956.78	$14,594.20	$484.36	$5,486.12	.....	$958.75	$52.50	.....	$1,314.44	$51,204.39	.....	.....
Wellholes,	321.91	57.14	382.36	.....	95.80	.....	21.80	.....	.....	15.02	894.03	.....	.....
Manholes,	6.42	.....	33.40	.....	4.81	.....	.....	.....	.....	.27	44.90	.....	.....
Flush gates,	.....	.....	.....	458.41	55.02	.....	.....	.....	.....	.....	513.43	.....	.....
Total costs,	$26,685.57	$2,013.92	$15,009.96	$942.77	$5,641.75	.....	$980.55	$52.50	.....	$1,329.73	$52,656.75	.....	.....
MAINTENANCE, REPAIRING. CITY COST.													
Vitrified clay pipe,	$628.66	$117.58	$131.14	.....	$120.00	.....	$86.70	$4.50	.....	$31.40	$1,119.98	.....	.....
Brick,	23.25	5.75	7.60	.....	4.68	.....	1.50	.....	.....	.93	43.71	.....	.....
Concrete,	.....	.....	13.26	.....	1.59	.....	.....	.....	.....	.....	14.85	.....	.....
Manholes,	387.64	113.65	484.22	.....	126.04	$0.44	46.86	.....	.....	17.67	1,176.52	.....	.....
Wellholes,	1,380.50	250.11	1,868.34	.....	446.29	2.64	147.85	6.00	.....	65.17	4,166.90	.....	.....
Flush gates,	.....	.....	.....	$592.85	71.09	.....	.....	.....	.....	.....	663.94	.....	.....
Total cost,	$2,420.05	$487.09	$2,504.56	$592.85	$769.69	$3.08	$282.91	$10.50	.....	$115.17	$7,185.90	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Wellholes,	$12.96	.....	$9.32	.....	$3.10	.....	$3.00	.....	.....	$0.60	$28.98	.....	.....
Private drains, construction,	5,999.29	$229.46	2,826.01	.....	1,173.85	.....	352.11	$61.50	.....	316.33	10,958.55	.....	.....
Repairing and relaying,	375.30	16.95	108.46	.....	69.88	.....	48.00	15.00	.....	18.86	652.45	.....	.....
Construction to curb or special work,	100.25	3.00	35.37	.....	18.38	.....	9.25	.....	.....	5.24	171.49	.....	.....
Cleaning private drains,	195.19	4.33	4.61	.....	30.94	.....	44.40	.....	.....	9.75	289.22	.....	.....
Total cost,	$6,682.99	$253.74	$2,983.77	.....	$1,296.15	.....	$456.76	$76.50	.....	$350.78	$12,100.69	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

SEWERS—Continued.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
MAINTENANCE, FLUSHING.													
Total costs,	$3,758.84	.....	$0.43	.....	$720.77	$1,777.82	$298.40	.....	.....	$170.99	$6,727.25	.....	.....
MAINTENANCE, CLEANING.													
Vitrified clay pipe,	$2,297.83	$498.69	$2.21	.....	$869.06	.....	$167.90	.....	.....	$108.62	$3,444.31	.....	.....
Brick,	1,877.32	339.76	1.78	.....	277.83	.....	9.00	.....	.....	87.51	2,593.15	.....	.....
Outlets,	207.42	.....	.....	.....	26.95	.....	6.50	.....	.....	10.77	251.64	.....	.....
Total cost,	$4,382.57	$838.45	$3.94	.....	$673.84	.....	$183.40	.....	.....	$206.90	$6,289.10	.....	.....
MAINTENANCE, Miscellaneous,	$605.23	$72.20	$144.05	$84.87	$121.68	.....	$77.00	.....	.....	$80.75	$1,185.78	.....	.....
Total cost,	$605.23	$72.20	$144.05	$84.87	$121.68	.....	$77.00	.....	.....	$80.75	$1,185.78	.....	.....
Grand total, Sewers,	$44,535.25	$3,665.40	$20,646.71	$1,620.49	$9,223.88	$1,780.90	$2,279.02	$139.50	.....	$2,204.82	$86,095.47	.....	.....
GARBAGE DISPOSAL.													
Garbage collection,	$36,910.31	.....	.....	$1,400.36	$7,153.02	$19,470.02	$2.30	.....	.....	$1,825.94	$66,761.95	lbs. 30,432,263	$0.0021
Garbage disposal,	1,694.08	.....	.....	.....	211.42	.....	.....	.....	.....	67.68	1,973.18	.....	.....
Total cost,	$38,604.39	.....	.....	$1,400.36	$7,364.44	$19,470.02	$2.30	.....	.....	$1,893.62	$68,735.13	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

ASHES AND REFUSE DISPOSAL.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
												Loads.	
Ashes,	$91,493.54	$13,083.96	.....	$2,799.68	$15,379.61	$15,732.32	$751.45	.....	.....	$4,302.98	$143,543.54	35,777	$4.012
Maintenance of dumps,	6,331.40	196.90	.....	.....	821.86	.....	.50	.....	.....	320.33	7,670.99	.....	.....
Refuse,	29,703.50	2,703.20	.....	.....	4,890.76	6,841.43	8.00	.....	$15.00	1,485.32	45,647.21	8,524	5.356
Logan street incinerator,	.....	.....	.....	900.02	108.00	.....	.....	.....	.....	.....	1,008.02	.....	.....
Total cost,	$127,528.44	$15,984.06	.....	$3,699.70	$21,200.23	$22,573.75	$759.95	.....	$15.00	$6,108.63	$197,869.76	.....	.....
Grand total, Ashes, Refuse, and Garbage Disposal,	$166,132.83	$15,984.06	.....	$5,100.06	$28,564.67	$42,043.77	$762.25	.....	$15.00	$8,002.25	$266,604.89	.....	.....

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CLASSIFICATION OF EXPENSE—*Continued.*

HIGHWAYS.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
CONSTRUCTION. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
Bituminous macadam,	$35,296.67	$30,356.66	$52,485.65	$72.80	$15,341.94	.....	$2,886.85	$4,720.75	$212.50	$1,817.58	$143,191.40	.....	.....
Granite block,	8,066.72	1,879.97	17,630.79	1.50	3,403.80	.....	36.15	66.00	264.10	419.82	31,768.85	.....	.....
Cinders,	8,561.63	6,039.43	344.75	.....	1,937.16	.....	481.95	.....	288.75	426.45	18,080.12	.....	.....
Gravel,	3,035.24	692.70	202.22	37.66	537.59	.....	260.10	.....	86.25	165.80	5,017.56	.....	.....
Asphalt,	7,351.47	2,584.27	11,885.40	35.82	2,753.67	.....	253.48	279.00	174.30	383.52	25,700.93	.....	.....
Total cost,	$62,311.73	$41,553.03	$82,548.81	$147.78	$23,974.16	.....	$3,918.53	$5,065.75	$1,025.90	$3,213.17	$223,758.86	.....	.....
MAINTENANCE. CITY COST.													
Water-bound macadam,	$4,340.17	$3,031.27	$4,638.51	.....	$1,561.53	$2.26	$338.80	$443.25	.....	$218.49	$14,574.28	.....	.....
Bituminous concrete,	5,575.83	1,384.79	10,223.96	.....	2,212.45	.....	449.95	521.25	.....	281.48	20,649.71	.....	.....
Bituminous macadam,	22,189.36	14,318.92	34,676.19	$6.50	9,417.56	157.38	2,177.86	3,820.50	.....	1,133.03	87,897.30	.....	.....
Wood block,	3,508.31	743.48	3,370.61	132.80	978.25	7.33	220.45	.....	.....	169.08	9,130.31	.....	.....
Granite block,	1,432.94	321.30	296.35	.....	256.08	.....	9.10	.....	.....	74.45	2,390.22	.....	.....
Brick,	2,098.06	541.55	697.50	17.29	418.31	1.76	6.30	19.50	.....	103.84	3,904.11	.....	.....
Bitulithic,	540.60	110.00	441.27	.....	149.08	.....	21.05	103.50	.....	26.05	1,391.55	.....	.....
Hassam,	216.60	171.31	486.14	.....	112.68	.....	38.25	15.00	.....	11.73	1,051.71	.....	.....
Gravel,	12,668.38	6,595.96	9,679.74	.....	3,745.72	.....	1,250.95	379.50	.....	639.64	34,959.89	.....	.....
Fences,	3,021.42	123.67	609.67	58.63	528.45	.....	449.75	.....	.....	140.50	4,932.09	.....	.....
Asphalt,	11,495.57	3,983.50	38,943.72	.....	6,864.03	.....	1,094.35	1,079.25	.....	604.02	64,064.44	.....	.....
Miscellaneous,	1,647.25	13.00	227.13	200.50	389.11	7.65	1,065.27	.....	.....	81.68	3,631.59	.....	.....
Mixed concrete,	253.85	58.65	104.19	.....	56.53	.....	41.70	.....	.....	12.69	527.61	.....	.....
Street signs,	2,595.88	.....	233.33	652.63	492.70	11.88	506.85	.....	.....	105.11	4,598.38	.....	.....
Culvert,	65.73	.....	37.65	.....	13.21	.....	3.25	.....	.....	3.43	123.27	.....	.....
Total cost,	$71,649.95	$31,397.40	$104,665.96	$1,068.35	$27,195.69	$188.26	$7,673.88	$6,381.75	.....	$3,605.22	$253,826.46	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

HIGHWAYS—Continued.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
MAINTENANCE. ASSESSABLE COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Water-bound macadam,	$656.44	$221.05	$293.49	.....	$170.23	.....	.....	$217.50	.....	$31.72	$1,590.43	.....	.....
Bituminous concrete,	16.32	9.20	1.27	.....	3.31	.....	.....	.....	.....	.78	30.88	.....	.....
Bituminous macadam,	4,457.71	1,341.76	6,713.58	$42.00	1,702.07	.....	$581.95	838.50	.....	209.86	15,887.43	.....	.....
Wood block,	1,250.27	435.45	1,886.39	.....	436.15	.....	1.35	.....	.....	60.78	4,070.39	.....	.....
Granite block,	1,912.54	352.84	841.80	.....	385.54	.....	8.80	.....	$2.00	94.96	3,598.48	.....	.....
Brick,	717.77	218.45	202.50	.....	140.98	.....	.....	.....	.....	36.12	1,315.82	.....	.....
Bitulithic,	362.70	117.20	461.61	.....	116.90	.....	4.90	9.00	.....	18.81	1,091.12	.....	.....
Hassam,	1,520.74	188.49	1,876.15	.....	454.75	.....	28.30	.....	94.50	81.51	4,244.44	.....	.....
Gravel,	165.35	86.49	55.00	.....	44.20	.....	2.10	51.00	.....	8.40	412.54	.....	.....
Asphalt,	305.41	102.69	961.46	.....	177.98	.....	41.13	49.50	7.20	15.74	1,661.11	.....	.....
Mixed concrete,	6.60	2.00	2.19	.....	1.34	.....	.....	.....	.....	.36	12.49	.....	.....
Miscellaneous,	1.95	.....	.....	.....	.24	.....	.....	.....	.....	.09	2.28	.....	.....
Total cost,	$11,373.80	$3,075.62	$13,295.44	$42.00	$3,633.69	.....	$668.53	$1,165.50	$103.70	$559.13	$33,917.41	.....	.....
Grand total, Highways,	$145,335.48	$76,026.05	$200,510.21	$1,258.13	$54,803.54	$188.26	$12,260.94	$12,613.00	$1,129.60	$7,377.52	$511,502.73	.....	.....
SIDEWALKS AND CURBING.													
CONSTRUCTION. CITY COST.													
Concrete walks,	$442.32	$107.92	$216.91	.....	$97.76	.....	$2.30	.....	$22.80	$22.56	$912.57	.....	.....
Granite curb,	13,463.64	2,098.05	2,231.74	.....	2,248.94	.....	55.65	.....	.....	695.12	20,793.14	.....	.....
Cinder walks,	571.74	209.30	.06	.....	97.44	.....	2.00	.....	.....	28.92	909.46	.....	.....
Total cost,	$14,477.70	$2,415.27	$2,448.71	.....	$2,444.14	.....	$59.95	.....	$22.80	$746.60	$22,615.17	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

SIDEWALKS AND CURBING.—Continued.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
CONSTRUCTION. ASSESSABLE COST.													
Concrete walks,	$4,309.02	$1,891.72	$3,533.38	.....	$1,165.23	.....	$33.50	.....	$224.40	$218.31	$10,875.56	.....	.....
Granite curb,	1,041.13	957.45	18,739.46	.....	2,563.91	.....	19.35	.....	.....	53.56	23,374.86	.....	.....
Cinder walk,	379.09	59.60	44.81	$194.84	83.70	.....	.....	.....	.....	19.17	781.21	.....	.....
Total cost,	$5,729.24	$2,408.77	$22,317.65	$194.84	$3,812.84	.....	$52.85	.....	$224.40	$291.04	$35,031.63	.....	.....
MAINTENANCE. CITY COST.													
Concrete walks,	$670.77	$234.75	$365.34	.....	$157.49	.....	.....	.....	$10.80	$30.72	$1,469.87	.....	.....
Brick walks,	1,017.89	140.25	217.14	.....	222.76	$360.13	$14.05	.....	.....	50.81	2,079.03	.....	.....
Granite curb,	7,282.76	998.91	689.99	.....	1,132.78	.....	65.10	.....	33.00	370.49	10,573.03	.....	.....
Cinder walks,	22.77	.....	3.77	.....	5.13	.....	15.10	.....	.....	1.11	47.88	.....	.....
Drawing curb from jobs,	75.82	19.55	.....	.....	11.73	.....	.....	.....	.....	2.38	109.48	.....	.....
Sanding walks,	105.26	74.96	3.60	.....	22.61	.....	.....	.....	.....	4.67	211.10	.....	.....
Turfing tree belt,	877.89	295.15	3.26	.....	147.16	.....	5.60	.....	.....	44.46	1,373.52	.....	.....
Total cost,	$10,053.16	$1,763.57	$1,339.10	.....	$1,699.66	$360.13	$99.85	.....	$43.80	$504.64	$15,863.91	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Brick walks,	$4.60	$2.00	.....	.....	$0.82	.....	.....	.....	.....	$0.24	$7.66	.....	.....
Driveways,	452.09	166.80	$792.05	.....	171.87	.....	.....	.....	.....	22.87	1,605.68	.....	.....
Total cost,	$456.69	$168.80	$792.05	.....	$172.69	.....	.....	.....	.....	$23.11	$1,613.34	.....	.....
Grand total, Sidewalks and Curbing,	$30,716.79	$6,756.41	$26,897.51	$194.84	$8,129.33	$360.13	$212.65	.....	$291.00	$1,565.39	$75,124.05	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

BRIDGES.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
CONSTRUCTION. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
**Indian Orchard Bridge.													
Engineering,	$266.49	.....	.....	.....	$33.31	.....	.....	.....	.....	$11.07	$310.87	.....	.....
Renovating pier under bridge,	2,879.10	$53.43	$577.11	$353.14	526.01	.....	$338.60	.....	$39.60	142.51	4,909.50	.....	.....
Unloading lumber,	171.92	68.87	.....	.....	34.34	.....	36.75	.....	.....	8.63	320.51	.....	.....
Watching,	438.65	.....	.....	.....	55.36	.....	.....	.....	.....	22.65	516.66	.....	.....
Building temporary walk,	38.02	.....	31.42	.....	9.29	.....	6.00	.....	.....	1.95	86.68	.....	.....
Erecting and furnishing steel,	.....	.....	‡96.49	20,172.42	2,409.11	.....	.....	.....	.....	.....	22,485.04	.....	.....
Building deck,	627.38	150.45	150.67	101.45	133.98	.....	54.50	.....	.....	32.09	1,250.52	.....	.....
Total cost,	$4,421.56	$272.75	$662.71	$20,627.01	$3,201.40	.....	$435.85	.....	$39.60	$218.90	$29,879.78	.....	.....
MAINTENANCE. CITY COST.													
Abbe Avenue Bridge.													
Railings,	$12.24	.....	.....	.....	$1.53	.....	.....	.....	.....	$0.54	$14.31	.....	.....
Armory Street Bridge (N. Y.N.H.&H.R.R.).													
Roadway,	32.30	$8.00	$38.94	.....	9.71	.....	.....	.....	.....	1.67	90.62	.....	.....
Cottage Street Bridge.													
Redecking,	21.39	.....	20.84	.....	.52	.....	.....	.....	.....	1.17	43.92	.....	.....
*Cottage Street Bridge.													
Over Poor Brook,	1.45	.....	.....	.....	.48	.....	$2.50	.....	.....	.05	4.48	.....	.....
†Dwight Street Underpass.													
Painting,	3,284.98	.....	144.59	$876.45	551.64	.....	109.75	.....	.....	181.25	5,148.66	.....	.....
Ludlow Bridge.													
Roadway,	7.18	2.50	.20	.....	1.23	.....	.....	.....	.....	.38	11.49	.....	.....
Lighting lanterns,	22.62	.....	.....	3.75	3.26	.....	.....	.....	.....	.81	30.44	.....	.....
Engineering,	56.21	.....	.....	.....	7.01	.....	.....	.....	.....	2.22	65.44	.....	.....
Strengthening Reinforcements,	.....	.....	.....	487.00	.....	.....	.....	.....	.....	.....	487.00	.....	.....

**Chargeable to Capital Account. ‡Credit. *Continuation of 1920 work. †Work not completed in 1921.

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CLASSIFICATION OF EXPENSE.—*Continued.*

BRIDGES—Continued. MAINTENANCE. CITY COST.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
North End Bridge.													
Flush coating wood blocks,	$70.38	$63.90	$115.03	.....	$30.37	.....	.....	.....	.....	$3.76	$283.46	.....	.....
Cleaning,	20.89	.....	.....	.....	2.62	.....	.....	.....	.....	1.00	24.51	.....	.....
†Policing,	1,428.67	.....	.....	.....	181.93	.....	$1.75	.....	.....	85.64	1,697.99	.....	.....
Building temporary fence,	30.07	.....	22.49	.....	6.90	.....	4.00	.....	.....	.96	64.42	.....	.....
Cleaning lower cord,	366.89	.....	.....	.....	47.33	.....	8.50	.....	.....	19.05	441.77	.....	.....
Painting lower cord,	684.59	.....	‡28.07	$124.14	99.96	.....	14.00	.....	.....	38.37	932.99	.....	.....
Repairing,	18.98	.....	.....	100.00	16.03	.....	14.00	.....	.....	.62	149.63	.....	.....
Repairing sidewalk,	6.53	.....	.....	.....	.82	.....	.....	.....	.....	.33	7.68	.....	.....
Roadway,	394.88	18.00	128.56	114.73	86.25	.....	43.15	.....	.....	19.58	805.15	.....	.....
Old Toll Bridge.													
Roadway,	46.52	.....	35.18	.....	10.39	.....	3.00	.....	.....	1.96	97.05	.....	.....
Cleaning,	5.40	10.35	.....	.....	1.91	.....	.....	.....	.....	.18	17.84	.....	.....
Tightening bolts,	713.74	.....	75.54	2.65	104.75	.....	47.00	.....	.....	34.02	977.70	.....	.....
Watching,	3,830.45	.....	.....	41.08	492.34	.....	.....	.....	.....	231.39	4,595.26	.....	.....
Inspecting,	.....	.....	.....	43.66	.....	.....	.....	.....	.....	.....	43.66	.....	.....
Replacing floor timbers in new section,	39.99	.....	4.00	.....	6.58	.....	9.00	.....	.....	1.89	61.46	.....	.....
Renailing floor in new section,	37.60	.....	.....	25.50	7.78	.....	.....	.....	.....	1.80	72.68	.....	.....
Unloading lumber,	160.80	55.51	.....	.....	27.78	.....	6.38	.....	.....	8.78	259.25	.....	.....
Redecking old section,	686.98	88.00	‡206.48	1,139.39	209.80	.....	4.00	.....	.....	36.53	1,958.17	.....	.....
†Repairing,	639.74	18.00	66.10	223.76	123.12	.....	45.50	.....	.....	32.95	1,149.17	.....	.....
Page Boulevard Bridge.													
Building fence,	70.38	.....	22.95	13.38	14.51	.....	12.00	.....	.....	2.22	135.44	.....	.....
Pasco Road Bridge.													
Engineering,	4.09	.....	.....	.....	.51	.....	.....	.....	.....	.18	4.78	.....	.....
Closing roadway,	2.24	.....	.....	.....	.52	.....	2.00	.....	.....	.12	4.88	.....	.....
Replanking bridge,	97.28	6.00	‡17.16	166.84	31.95	.....	8.25	.....	.....	5.07	298.23	.....	.....
Red House Crossing.													
Repairing,	29.52	5.18	1.71	16.95	7.70	.....	9.50	.....	.....	1.33	71.89	.....	.....

†Work not completed in 1921. ‡Credit.

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CLASSIFICATION OF EXPENSE.—*Continued.*

BRIDGES—Continued.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
MAINTENANCE. CITY COST.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
South End Bridge.													
Roadway,	$157.83	$12.75	$91.20	.....	$35.06	.....	$22.50	.....	.....	$7.86	$327.20	.....	.....
Policing,	1,151.95	.....	.....	.....	146.64	.....	1.00	.....	.....	69.05	1,368.64	.....	.....
Repairing decking,	61.09	.....	72.03	.....	17.83	.....	13.50	.....	.....	1.97	166.42	.....	.....
Putting up warning signs,	4.40	.....	3.04	.....	.92	.....	.....	.....	.....	.24	8.60	.....	.....
††Engineering,	127.89	.....	.....	.....	15.97	.....	.....	.....	.....	5.22	149.08	.....	.....
‡Advertising for steel structural work,	.....	.....	.....	$275.40	.....	.....	.....	.....	.....	.....	275.40	.....	.....
††Removing old deck,	608.74	304.43	1.84	.....	121.02	.....	61.25	.....	.....	32.70	1,129.48	.....	.....
Examination,	.....	.....	.....	693.24	.....	.....	.....	.....	.....	.....	693.24	.....	.....
St. James Avenue (N.Y., N.H.&H.R.R.).													
Sidewalks,	30.64	.....	7.71	.....	5.20	.....	4.00	.....	.....	.96	48.51	.....	.....
St. James Avenue (B.&A.).													
Roadway,	3.97	.....	.60	.....	.57	.....	.....	.....	.....	.21	5.35	.....	.....
Sundry Bridges.													
Railings,	21.20	.....	2.91	.....	2.98	.....	.....	.....	.....	.78	27.87	.....	.....
Total cost,	$14,992.64	$592.62	$603.25	$4,347.92	$2,433.42	.....	$446.58	.....	.....	$834.83	$24,251.21	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Old Toll Bridge.													
Repairing break caused by Buchhols machine,	$29.41	.....	$4.47	.....	$4.36	.....	$1.00	.....	.....	$1.47	$40.71	.....	.....
Total cost,	$29.41	.....	$4.47	.....	$4.36	.....	$1.00	.....	.....	$1.47	$40.71	.....	.....
Grand total, Bridges,	$19,443.61	$865.37	$1,270.43	$24,974.93	$5,639.18	.....	$883.38	.....	$39.60	$1,055.20	$54,171.70	.....	.....

††Work not completed in 1921. ‡Capital Account.

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CLASSIFICATION OF EXPENSE.—*Continued.*

STREET CLEANING.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Patrol,	$58,079.43	$2,582.04	$96.70	$150.09	$3,051.79	$406.34	$2,501.71	.....	$194.00	$3,087.79	$75,149.89	.....	.....
Macadam,	42,564.80	8,157.89	.....	.....	6,619.96	1,956.57	199.15	.....	.....	2,288.08	61,786.45	.....	.....
Wellholes,	3,296.28	1,138.37	4.52	.....	577.65	.....	203.85	.....	.....	170.70	5,391.37	.....	.....
Gravel,	754.01	376.23	.....	.....	140.33	.....	.....	.....	.....	39.32	1,309.89	.....	.....
Machine,	250.52	40.50	.....	.....	36.71	.....	.....	.....	.....	14.88	342.61	.....	.....
Crosswalks,	250.85	11.49	.....	.....	32.82	.....	.....	.....	.....	11.13	306.29	.....	.....
Gutters,	431.13	92.59	.....	.....	65.23	.....	.....	.....	.....	19.85	608.80	.....	.....
Catch Basin,	19.04	8.50	.....	.....	3.43	.....	.....	.....	.....	1.02	31.99	.....	.....
Leaves,	410.83	196.50	.....	.....	75.76	.....	.....	.....	.....	23.98	707.07	.....	.....
Total cost,	$106,056.89	$12,604.11	$101.22	$150.09	$15,603.68	$2,362.91	$2,904.71	.....	$194.00	$5,656.75	$145,634.36	.....	.....
Sanding,	$568.25	$402.40	$557.59	$10.24	$215.54	$37.63	$191.12	.....	.....	$28.94	$2,011.71	.....	.....
Removal of snow and ice,	18,827.34	8,575.20	29.70	36.60	3,528.51	131.56	786.95	.....	$63.00	953.85	32,932.71	.....	.....
Total cost,	$19,395.59	$8,977.60	$587.29	$46.84	$3,744.05	$169.19	$978.07	.....	$63.00	$982.79	$34,944.42	.....	.....
Grand total, Street Cleaning,	$125,452.48	$21,581.71	$688.51	$196.93	$19,347.73	$2,532.10	$3,882.78	.....	$257.00	$6,639.54	$180,578.78	.....	.....
OILING STREET.													
MAINTENANCE. CITY COST.												sq. yds.	
Oil,	$684.81	$94.48	$4,566.07	$199.39	$781.49	.....	$931.55	.....	.....	$36.03	$7,293.82	1,690,132	$0.0043
Oil and sand,	7,887.09	4,135.74	17,523.13	.....	3,756.45	.....	1,345.15	.....	.....	412.65	35,060.21	2,125,423	.0164
Total cost,	$8,571.90	$4,230.22	$22,089.20	$199.39	$4,537.94	.....	$2,276.70	.....	.....	$448.68	$42,354.03	.....	.....
MAINTENANCE. ASSESSABLE COST.													
Oil,	$34.14	.....	$348.10	.....	$54.78	.....	$72.50	.....	.....	$1.73	$511.25	.....	.....
Total cost,	$34.14	.....	$348.10	.....	$54.78	.....	$72.50	.....	.....	$1.73	$511.25	.....	.....
Grand total, Oiling Street,	$8,606.04	$4,230.22	$22,437.30	$199.39	$4,592.72	.....	$2,349.20	.....	.....	$450.41	$42,865.28	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.												
SPRINKLING STREETS	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
City cost,.....	$3,709.94	$43.68	.....	$7,327.26	$2,083.04	.....	$6,089.00	.....	.....	$188.72	$19,441.64	.....	.....
Total cost,.....	$3,709.94	$43.68	.....	$7,327.26	$2,083.04	.....	$6,089.00	.....	.....	$188.72	$19,441.64	.....	.....
LIGHTING STREETS.													
Lighting streets and bridges,	.....	.....	$147,142.60	$3,116.93	.....	.....	.....	.....	.....	.....	$150,259.53	.....	.....
Total cost,.....	.....	.....	$147,142.60	$3,116.93	.....	.....	.....	.....	.....	.....	$150,259.53	.....	.....
SHOPS.													
Making signs,.....	$274.88	.....	$86.26	$2.76	.....	.....	$4.00	.....	.....	.....	$367.90	.....	.....
Repairing drinking fountains,.....	147.34	$25.10	.....	20.84	$25.62	.....	14.95	.....	.....	$5.31	239.16	.....	.....
Total cost,.....	$422.22	$25.10	$86.26	$23.60	$25.62	.....	$18.95	.....	.....	$5.31	$607.06	.....	.....
ADMINISTRATIVE AUTOMOBILE.													
Mayor's automobile,.....	$855.30	.....	$301.17	$299.84	.....	.....	$3.00	.....	.....	.....	$1,459.31	.....	.....
Municipal automobile,....	253.18	.....	245.63	98.59	.....	.....	1.50	.....	.....	.....	598.90	.....	.....
Total cost,.....	$1,108.48	.....	$546.80	$398.43	.....	.....	$4.50	.....	.....	.....	$2,058.21	.....	.....
OUTSIDE COSTS.													
Maintenance of Building Department cars,.....	$150.44	.....	$754.67	$0.80	.....	.....	.....	.....	.....	.....	$905.91	.....	.....
Material sold,.....	753.21	$323.01	4,924.66	.....	$309.37	$1.32	$105.65	.....	.....	$33.60	6,450.82	.....	.....
Miscellaneous,.....	49.52	.....	865.61	.....	121.07	.....	70.50	.....	$20.70	2.64	1,130.04	.....	.....

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CLASSIFICATION OF EXPENSE.—*Continued.*

OUTSIDE COSTS—Continued.	Cost of Work Performed. Labor, Material, Equipment, and Other Charges. Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.	Total Work Units.	Unit Cost.
Police Department garage,	$687.03	$122.84	$339.51	$198.81	$173.30	.....	$28.00	.....	$31.20	$36.92	$1,617.61	.....	.....
Private drains, chargeable to departments,	91.46	4.00	43.95	.....	18.09	.....	5.00	$1.50	.....	4.89	168.89	.....	.....
Rent of equipment,	9.75	.....	4.49	.....	2.65	.....	.....	7.50	.....	.30	24.69	.....	.....
Snow removal, City Property,	477.51	83.95	.....	.....	.....	.....	.....	.....	.....	22.10	583.56	.....	.....
Total costs,	$2,218.92	$533.80	$6,932.89	$199.61	$624.48	$1.32	$209.15	$9.00	$51.90	$100.45	$10,881.52	.....	.....
STABLES AND YARDS. IMPROVEMENTS.													
Building snow dump, South End Yard,	$210.56	.....	$21.29	$0.45	.....	.....	$64.00	.....	.....	$6.78	$303.08	.....	.....
Building breakwater at snow dump, South End Yard,	592.58	$108.00	88.91	5.25	.....	.....	37.10	.....	.....	.....	831.84	.....	.....
Repairing brick paving, Summer Street Yard,	138.15	18.40	12.29	.....	.....	.....	.....	.....	.....	.....	168.84	.....	.....
Laying granite blocks on concrete base under trestle, Summer Street Yard,	3,997.34	31.05	1,605.01	28.00	.....	.....	73.75	$162.00	$2.00	.....	5,899.15	.....	.....
Building pump house, Summer Street Yard,	54.15	.....	14.14	1.04	.....	.....	2.00	.....	.....	.....	71.33	.....	.....
Building fence, South End Yard,	.....	.....	.....	1,379.00	.....	.....	.....	.....	.....	.....	1,379.00	.....	.....
Building wellhole, South End Yard,	16.54	.....	5.56	.....	.....	.....	.....	.....	.....	.....	22.10	.....	.....
Total cost,	$5,009.32	$157.45	$1,747.20	$1,413.74	.....	.....	$176.85	$162.00	$2.00	$6.78	$8,675.84	.....	.....

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CLASSIFICATION OF EXPENSE.—*Concluded.*

SERVICES RENDERED.	Cost of Work Performed.												
	Labor, Material, Equipment, and Other Charges.											Total Work Units.	Unit Cost.
NOT CHARGEABLE TO DEPARTMENTAL COSTS.	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.		
Lines and grades, sidewalks and curbings,	$328.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	$328.05	.....	.....
Surveys and plans for Assessors' Office,	400.97	.....	.....	.....	.....	.....	.....	.....	.....	.....	400.97	.....	.....
Surveys and plans or estimates for Board of Public Works,	2,795.89	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,795.89	.....	.....
Surveys, maps or plans for Fire Department,	2.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.22	.....	.....
Surveys, maps or plans for Police Department,	1.17	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.17	.....	.....
Surveys, plans, etc., for City Planning Commission,	132.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	132.30	.....	.....
Engineering for Law Department,	209.24	.....	.....	.....	.....	.....	.....	.....	.....	.....	209.24	.....	.....
Miscellaneous work for all other departments,	35.51	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.51	.....	.....
Engineering for City Property Committee,	156.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	156.13	.....	.....
Topographical survey,	6,175.63	.....	.....	$5.25	.....	.....	$3.00	.....	.....	.....	6,183.88	.....	.....
Engineering jobs not chargeable to overhead,	2,877.41	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,877.41	.....	.....
Constable work,	760.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	760.00	.....	.....
Driving pay car,	580.11	.....	$1.94	.....	.....	.....	.....	.....	.....	.....	582.05	.....	.....
Miscellaneous work not chargeable to overhead,	610.52	.....	.....	.....	.....	.....	.25	.....	.....	.....	610.77	.....	.....
Relief sewer design,	28.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	28.30	.....	.....
Engineering for Street Lighting,	769.66	.....	.....	.....	.....	.....	5.50	.....	.....	.....	775.16	.....	.....
Driving for Engineering Department,	1,255.74	.....	.....	.....	.....	.....	9.35	.....	.....	.....	1,265.09	.....	.....
Setting stone bounds,	235.69	.....	218.18	.....	.....	.....	54.80	.....	.....	.....	508.67	.....	.....
Locating wells,	407.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	407.53	.....	.....
Taking inventory,	7.93	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.93	.....	.....
Total cost,	$17,770.00	.....	$220.12	$5.25	.....	.....	$72.90	.....	.....	.....	$18,068.27	.....	.....

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RECAPITULATION OF COST OF WORK PERFORMED.

LABOR, MATERIAL, EQUIPMENT, AND OTHER CHARGES.

	Labor.	Hired Equipment.	Materials.	Other Charges.	Overhead Expense.	City Teams.	Trucks.	Rollers.	Other City Equipment.	Depreciation of Equipment.	Total Cost.
Sewers,	$44,535.25	$3,665.40	$20,646.71	$1,620.49	$9,223.88	$1,780.90	$2,279.02	$139.50	.....	$2,204.32	$86,095.47
Garbage,	38,604.39	.....	.....	1,400.36	7,364.44	19,470.02	2.30	.....	.....	1,893.62	68,735.13
Ashes and refuse,	127,528.44	15,984.06	.....	3,699.70	21,200.23	22,573.75	759.95	.....	$15.00	6,108.63	197,869.76
Highways,	145,335.48	76,026.05	200,510.21	1,258.13	54,803.54	188.26	12,260.94	12,613.00	1,129.60	7,377.52	511,502.73
Bridges,	14,285.42	288.19	606.38	4,072.52	2,300.79	.....	386.28	.....	.....	798.38	22,737.96
Sidewalks and curbing,	30,716.79	6,756.41	26,897.51	194.84	8,129.33	360.13	212.65	.....	291.00	1,565.39	75,124.05
Sprinkling streets,	3,709.94	43.68	.....	7,327.26	2,083.04	.....	6,089.00	.....	.....	188.72	19,441.64
Oiling streets,	8,606.04	4,230.22	22,437.30	199.39	4,592.72	.....	2,349.20	.....	.....	450.41	42,865.28
Street cleaning,	125,452.48	21,581.71	688.51	196.93	19,347.73	2,532.10	3,882.78	.....	257.00	6,689.54	180,578.78
Street lighting,	.....	.....	.....	147,142.60	3,116.93	.....	.....	.....	.....	.....	150,259.53
Shops,	147.34	25.10	.....	20.84	25.62	.....	14.95	.....	.....	5.31	239.16
Stables and yards improvements,	5,009.32	157.45	1,747.20	1,413.74	.....	.....	176.35	162.00	2.00	6.78	8,675.34
Services rendered other departments,	19,988.92	533.80	7,153.01	204.86	624.48	1.32	282.05	9.00	51.90	100.45	28,949.79
Outside,	173.20	.....	19.99	35.27	24.90	.....	.....	24.00	15.50	6.41	299.27
Administrative autos,	1,108.48	.....	546.80	398.43	.....	.....	4.50	.....	.....	.....	2,058.21
Services rendered chargeable to capital accounts,	168,951.23	25,085.79	81,093.58	23,503.08	37,834.50	.....	7,364.23	1,488.00	3,968.80	9,111.38	358,400.59
Grand total,	$729,152.72	$154,377.86	$362,347.20	$192,688.44	$170,672.13	$46,906.48	$36,064.70	$14,435.50	$5,730.80	$36,456.86	$1,748,832.69

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REPORT

OF

ENGINEERING DIVISION

FOR THF FISCAL YEAR ENDING NOVEMBER 30, 1921.

SPRINGFIELD, MASS., December 26, 1921.

To Robert P. Marsh, Superintendent, Department Streets and Engineering, Springfield, Mass.

DEAR SIR:—The following covers a general description of the affairs of the Board of Public Works, as assisted by this division in the capacity of Engineer and Clerk:—

WORK IN GENERAL.

As required under the city ordinances, all hearings and office meetings of the board have been attended in order that the board might have the benefit of such information and data as pertain to the engineering branch of the board's affairs.

The work in general consisted of special studies and investigations of the matters referred to the board by the Mayor and Aldermen or the City Council, concerning the laying out, the alteration or widening, change of grade and discontinuance of highways; the laying out and construction of sewers and drains; the laying out, construction of sidewalks, as well as repairs to the same. A list of new streets laid out as public ways, also those altered or widened, will be found appended to this report.

STREET CONSTRUCTION.

Of the more important street work constructed during the year, according to orders of the City Council, based on report and recommendation of the Board of Public Works, may be mentioned the following:—

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DWIGHT ROAD.

The grading and roadway hardening of Dwight road from White street southerly to Dickinson street was completed early in the spring, a good share of the work having been performed during the early part of the winter season.

This improvement, about one mile in length, gives the property owners on the old road the relief they long and earnestly sought for. The old road laid out in 1783, two rods wide, was made fifty feet wide and many of the crooks and irregularities of the old layout greatly improved by altering the lines for most of the distance and the substitution of straightened courses and curves.

Prior to the recent improvement, the road at certain times of the year was well-nigh impassable, consisting of a narrow wheel track through the sand, that served to stall fire-fighting equipment in attempts to meet the demands of the locality.

The Board of Public Works hesitated for a considerable time before recommending this measure to the City Council in 1919, as it appeared that the common weal would be but little served, owing to the fact that the road ends on the south in a wild, undeveloped section of Longmeadow, very sparsely settled.

However, the board was led to make a favorable recommendation in view of the crying needs of property owners for some relief from the old inaccessible conditions.

The abutting lands have been greatly benefited through the construction of the new hardened and straightened roadway of ample width, making comfortable and convenient travel at all seasons of the year.

It would appear that some of the property owners benefited by this alteration are not fully alive to the great help that has been given them through this improvement, judging from the recent opposition to the betterment assessments placed upon lands on line of the new and improved roadway by the city in an action to recover back a fair share of the expense incurred by the city.

STAFFORD STREET EXTENSION.

The long contemplated and much discussed extension of Stafford street opens another thoroughfare of travel, connecting Cass street with the large and nearly built-up territory lying east of Armory street, the work of grading and the construction of a bituminous macadam roadway having been completed in the early fall season.

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This improvement was located through private lands, undeveloped, and in the main inaccessible, thereby resulting in great benefits to these private lands, as they have been placed on line of a new and improved thoroughfare of travel.

TAYLOR STREET EXTENSION.

The extension of Taylor street from Chestnut street to Spring street affords another new artery of travel from the downtown business section to the Armory Hill district, and will be greatly appreciated by the traveling public in process of time. The extension also served to open up considerable interior property that formerly had no connection with a main thoroughfare of travel. The full benefit of this improvement to the traveling public will be more fully realized when the present obstruction, the old Chestnut street engine house, which serves to obstruct a large part of the new roadway at the Chestnut street end, is removed.

CONTEMPLATED STREET IMPROVEMENTS.

The board has given the usual hearings and provided for the preliminary proceedings looking to a widening of Water street from William street to Court street, which will doubtless be needed in the near future as a southerly approach to the new bridge over Connecticut River now nearing completion, and which will provide a newly widened thoroughfare to the south, having a width of eighty feet. A report was forwarded to the City Council last spring, directing attention to the special requirements of law pertaining to the taking of lands from Court Square extension for highway uses. The report was referred back to the board in order that these special proceedings might be taken; this procedure, having been undertaken and finished, will enable the board to make final report at an early date.

WILLOW STREET EXTENSION.

Petition has been duly presented and referred to the Board of Public Works for the extension of Willow street from Hubbard avenue to Adams street, the petition leaving out of consideration for the present the widening of Willow street, as formerly proposed, from State street to Hubbard avenue. Hearings have been given by the board on this petition and it now remains for the board to decide upon the requirements of common

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convenience and necessity, and, if it decides in favor, estimate the land and building damages looking to a report favorable to the petitioners.

It would appear that the present time is opportune for the carrying out of this project; two reports favoring the measure having been previously made, one as early as 1912. There seems to be a concensus of opinion that this improvement is one of the larger and more important measures that should receive favorable action by the city.

There are now but a very few structures of considerable importance on line of the improvement, namely, the framed dwellings common to residential sections of the city.

SEWERS AND DRAINS.

The work of the board during the year has covered the usual amount of special studies for extensions to the system of sewers and drains, and the year has been marked by an unusually large expenditure for sewers and drains. However, there remain some outstanding orders recommended by the board that have not yet been constructed.

A good share of the work of pipe sewer extensions into newly developed sections of real estate interests have been made by the city in private streets not yet having been formally accepted by the city as public. The policy was established by the City Council years ago that it would be best for the city to perform this class of work, as these sewers must ultimately come under the city's care and maintenance, and the quality of the work would be practically assured by following this procedure.

All calculations for work of considerable importance are now being worked out under the special report and advice of Messrs. Metcalf and Eddy of 1920, especially in the consideration of the storm-water run-off.

PAGE BOULEVARD DRAIN.

The completion of this work during the past summer marks the first construction of large dimensions for the disposition of storm water as a part of the so-called "Separate System," having its discharge into Poor Brook. A large area will be accommodated by this drain, which may be extended in process of time into connecting streets and as real estate development in the locality requires.

PETITIONS PENDING.

The board has been requested, through petition duly referred to it by the City Council, to consider and report on the extension of the Mill

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River Valley intercepting sewer from the easterly end as heretofore ordered, but not yet constructed, at the junction of Hickory street and Wilbraham road, and extending easterly around the northerly side of the Mill River north branch to some point in the locality of St. Michael's cemetery, that will enable a sewer to be provided that shall reach northerly to the locality of Boston road and Berkshire avenue, where a considerable development has been made that requires the construction of a sanitary system of sewers for the drainage of buildings.

Petition is also pending for the extension of the Mill River Valley intercepting sewer through the valley of the Mill River, north branch, to some point in the vicinity of Breck road and Harding avenue to Boston road, and extension northerly to "Rushville," so-called. Many buildings have been erected during recent years in the locality of Rushville that are far out of reach of any part of the city's present sewerage system.

PECOUSIC VALLEY.

The board has had on file for some time a petition for a sanitary sewer through the Pecousic Valley from Connecticut River easterly to some point that will permit branch sewers to be provided. The board suggested to the petitioners the usual procedure of securing from prospective building interests the usual agreement pertaining to payment of sewer fees. These agreements have been in process of circulation for about a year, and at the time of this report have been returned to the board for its further consideration.

The construction of this sewer will necessarily entail a considerable expenditure as it must involve a submerged outlet into Connecticut River, and possibly two separate sewers around "Porter Lake." The detailed study for this work has not yet been made, so that but little can be outlined concerning details.

FUTURE WORK.

In order to follow out the measures provided for in Metcalf & Eddy's report concerning the order of construction that should be made for storm-water relief sewers, a sewer to relieve the downtown sections southerly of the Boston and Albany railroad should be provided for at an early date; this project involves the construction of a large main trunk sewer from Connecticut River through Hampden, Taylor, and Summer streets to a temporary connection and overflow from the Summer street sewer near Autumn street.

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Opportunity is here taken to express appreciation for the kindly relations and the courtesies extended during the year past on the part of all associated in the work.

Respectfully submitted,

CHAS. M. SLOCUM,
Engineer and Clerk, Board of Public Works.

Robert P. Marsh, Superintendent, Department of Streets and Engineering, Springfield, Mass.

DEAR SIR:—I beg to submit the following report of the Engineering Division for the year ending November 30, 1921.

The Engineering Division has made plans, studies, and furnished lines and grades for all construction work of the department. It has made the surveys and plans of all proposed improvements considered by the Board of Public Works. It has assisted the Board of Assessors in the matter of plans and descriptions of land parcels. It has assisted the law department by the making of surveys and plans, and the taking of photographs for law cases.

The topographical survey work of the entire city has been continued throughout the year, and it is hoped by the end of the next year the surveying field work will be completed. The plans of the topographical survey have been completed for about sixty per cent of the city's area.

The system of bridge inspection instituted last year has been continued this year, and by it many slight defects have been noted and remedied, a better condition maintained, and the liability of accident reduced.

The Old Toll bridge has had frequent inspections, renewal of part of the road surface, and some minor repairs. I consider the old part of this structure to be in poor condition and suggest that just as soon as any part of the new county bridge is ready, all travel be turned on it.

The North End bridge has had the renewal of twenty stringers, and some repairs to sidewalk and fence. The Street Railway completed early in the year the renewal of steel beams and floor under their track. In view of the fact that many stringers broke under the heavy loads that cross this structure, special officers have been stationed there to keep the load to the legal limit.

Following the suggestions of Consulting Engineer Wiggin in his report on the South End bridge, a contract was let to the Berlin Construction

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Company of Berlin, Conn., for the strengthening of the steel work. This work is progressing rapidly and should be completed early in 1922.

Of the work on the other bridges, the substructure of the Indian Orchard bridge was rebuilt and new steel trusses and wood block wearing surface were built; the Boston and Albany railroad strengthened the steel work of the Pasco Road bridge and the wearing surface was renewed by the city; at Putts bridge, between Springfield and Ludlow, a part of Consulting Engineer Wiggin's recommendations have been completed; the Dwight Street underpass has been thoroughly cleaned and painted.

I wish also at this time to thank you for the support and courtesies that I have received from you and to acknowledge the co-operation of the engineers and assistants of this division.

Respectfully submitted,

CHARLES H. RESTALL,
Chief Engineer.

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STREETS MADE PUBLIC, 1921.

BY ORDER OF THE CITY COUNCIL.

Name.	Limits.	Length in feet.	Width in feet.	Date of City Council's Order.
Albemarle street,	Westford circle to King street,	638	50	Dec. 20, 1920
Alberta street,	Mansfield street northerly to Allen street,	483	50	Dec. 13, 1920
Beauchamp street	Armory street easterly about 500',	498	50	Oct. 3, 1921
Beaumont terrace,	Beaumont street easterly as far as opened,	308	50 to 65.72	Jan. 24, 1921
Broadway extension layout anew,	Vernon street southerly to Court street,	535	57 to 60	Mar. 28, 1921
Carlton street,	Woodlawn street westerly as far as opened,	387	50	Sept. 12, 1921
Daviston street,	Allen street southeasterly to intersection easterly line of East Alvord street with southwesterly line of Daviston street,	941	50	Sept. 12, 1921
Denton circle,	Liberty street easterly to Woodmont street,	516.5	50	May 17, 1921
Edgeland street,	Fort Pleasant avenue westerly to westerly line of Coomes street,	622.5	50	Sept. 12, 1921
Glendell terrace,	Euclid avenue to Horace street. One branch,	369	40 to 60.40	Dec. 13, 1921
	One branch,	422	40 to 60.40	
Gold street,	Armory street northeasterly,	610.7	50	June 20, 1921
Gold street extension,	Northeasterly to Hamburg street,	255	50	Oct. 3, 1921
Lakeside street,	Wilbraham road southerly to Hickory street,	1,136	60	June 20, 1921
Lenox alley,	Lenox street to Cliftwood street,	200	30.3	Feb. 7, 1921
Littleton street,	Kendall street easterly to Chicopee road,	1,657	50	Mar. 21, 1921
Malden street,	Grand street southerly to Orange street,	586	50	Dec. 20, 1920
Massachusetts avenue,	Westford circle to King street,	552.5	84	Dec. 20, 1920
Maynard street,	Shattuck street to Acorn street,	1,201	70	Jan. 24, 1921
Meredith street,	Belmont avenue to Washington street,	798.5	50	Mar. 14, 1921
Phoenix terrace,	Phoenix street northeasterly to Newbury street,	1,367	50 to 100	Dec. 13, 1920

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STREETS MADE PUBLIC, 1921.—*Continued.*

BY ORDER OF THE CITY COUNCIL.

NAME.	LIMITS.	Length in feet.	Width in feet.	Date of City Council's Order.
Priscilla street,...	White street westerly to Whittier street,.....	304	50	Sept. 12, 1921
Randall place,...	Allen street northerly 700'	722	50	May 17, 1921
Rochelle street,..	Extension southerly from present southerly terminus as far as opened,	195	50	Sept. 20, 1921
Taft street,.....	Woodlawn street to Sylvan street,.....	306.5	50	Feb. 7, 1921
Taylor street extension,.....	Chestnut street to Spring street,.....	795	50	Dec. 27, 1920

LIST OF STREETS ON WHICH BETTERMENTS HAVE BEEN ASSESSED, DEC. 1, 1920, TO NOV. 30, 1921.

		Approved.
Belvidere street,.....	Belmont avenue to Fountain place,..	Oct. 24, 1921
Crestwood street,.....	Springfield street to Rimmon avenue,.	Feb. 7, 1921
Dover street,.....	Main street to Chestnut street,.....	Aug. 26, 1921
Dwight road,.....	White street to Tiffany street,.....	Oct. 24, 1921
Eloise street,.....	Sumner avenue to Paridon street,....	July 25, 1921
Kimberly street,.....	White street to Allen street,.....	Feb. 7, 1921
Stafford street extension,.	Cass street to Stafford street,.....	Nov. 23, 1921
Suffolk street,.....	Wilbraham road to Marlborough street,.....	Aug. 26, 1921
Washington street,.....	Commonwealth avenue to Woodlawn street,.....	Feb. 7, 1921
Wigwam place, ...	Dickinson street easterly (292'),....	Aug. 26, 1921
Woodlawn street,.....	Belmont avenue to Blake street,.....	Oct. 24, 1921

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REPORT

OF THE

STREET DIVISION

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1921.

Mr. R. P. Marsh, Superintendent of Streets and Engineering, Springfield, Mass.

DEAR SIR:—I herewith submit the annual report of the Street Division for the fiscal year ending November 30, 1921.

Our most important street work the past year has been the paving of Central street hill with granite block, the completion of Carew street, Berkshire avenue, and Stafford street extension.

Over ten miles of streets have been built or rebuilt the past season.

I would recommend the paving of Berkshire avenue from Bay road to Harvey street.

Attached herewith will be found a table showing the cost and expenses of the various functions performed by the division.

I desire to acknowledge the co-operation of the foremen and men of the division and to thank you for the courtesies which you have extended me.

Respectfully submitted,

A. H. WOODWARD,
Deputy Superintendent of Streets.

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STREET CONSTRUCTION.

PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
Broadway extension,.....	Court to Pynchon,..	Sheet asphalt,..	279	1,400	$84.17	$643.25	$6,003.66	$4.29
Central street,..	Maple to Cedar,...	Granite block,..	1,160	4,264	381.80	3,211.94	29,978.11	7.03
*Fulton street widening,....	southeast corner Cypress,.....	Granite block,..	....	32	14.84	69.98	653.17	....
*Liberty street widening,....	Chestnut to Armory	Sheet asphalt,..	....	3,966	264.36	1,827.83	17,059.70	....
†State street,...	Maple to School,...	Granite block,..	1,140	6,606	23.18	121.88	1,137.57	7.76
Totals,.....	.....	.....	....	....	$768.35	$5,874.88	$54,832.21	....

* Includes resetting curb and laying sidewalk.

† Denotes completion of 1920 work, unit cost includes 1920 work.

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TABLE OF PERMANENT PAVEMENTS.

PAVEMENTS HAVING A CONCRETE BASE.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Armory street,	Federal to Magazine,	Grit asphalt,	798	2,775	1916
Armory street,	Worthington to N. Y., N. H. & H. R. R.,	Granite blocks,	878	3,044	1914
Armory street,	N.Y., N.H. & H. R. R. to B. & A. R. R.,	Brick,	194	714	1918
Barnes street,		Bitulithic,	178	552	1909
Bay street,	Catharine to N. Y., N. H. & H. R. R.,	Grit asphalt,	1,295	4,778	1914
Belmont avenue,	At Locust and Mill streets,	Brick,	——	133	1912
Belmont avenue,	Mill street to Bellevue avenue,	Granite blocks,	1,702	4,507	1913
Belmont avenue,	Mill st. to Bellevue av., between rails,	Granite blocks,	——	2,260	1912
Belmont avenue,	Bellevue av. to Hall st., between rails,	Brick,	——	1,211	1901
Belmont avenue,	Hall to Oakland, between rails,	Brick,	——	914	1903
Belmont avenue,	Bellevue avenue to "X,"	Grit asphalt,	3,444	12,897	1914
Berkshire avenue,	Pine Point to Bay Road,	Concrete,	2,688	7,153	1920
Bliss street,	Main to Water,	Bitulithic,	963	3,104	1914
Boston road,	Berkshire avenue, easterly, 1 mile,	Concrete,	5,280	12,907	1915
Boston road,	End of 1915 work to Wilbraham line,	Concrete,	12,771	31,217	1916
Bradford street,	Main to Plainfield,	Wood blocks,	51	192	1915
Bridge street,	Chestnut to Davis alley,	Asphalt blocks,	195	712	1910
Bridge street,	Davis alley to Dwight,	Wood blocks,	102	373	1910
Bridge street,	Dwight to Barnes,	Sheet asphalt,	439	1,655	1915
Bridge street,	Barnes to Main,	Bitulithic,	251	870	1900
Bridge street,	Broadway to Water,	Bitulithic,	252	895	1911
Broadway,	Court to Pynchon,	Sheet asphalt,	279	1,400	1921
Carew street,	Intersection of Chestnut,	Brick,	50	229	1914
Catharine street,	State to Bay,	Brick,	1,722	5,691	1900
Central street,	Maple to Cedar,	Granite blocks,	1,160	4,130	1921
Charter avenue,	Walnut to Oak street,	Concrete,	629	1,084	1915
Chestnut street,	Pearl to Bridge,	Bitulithic,	201	952	1912

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TABLE OF PERMANENT PAVEMENTS.—*Continued.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Chestnut street,	Linden to Everett,	Wood blocks,	419	1,438	1909
Chestnut street,	Everett to Carew,	Wood blocks,	359	1,245	1917
Chestnut street,	Carew to Allendale,	Brick,	1,015	3,432	1900
Chestnut street,	Allendale street to Jefferson avenue,	Wood blocks,	842	2,881	1916
Court street,	Main street to Court Square avenue,	Sheet (rock) asphalt,	317	1,149	1897
Court street,	Main street to Court Square avenue,	Brick,	——	174	1897
Court street,	Main street to Court Square avenue,	Brick,	——	128	1907
Court street,	Court Square avenue to Water street,	Bitulithic,	617	2,699	1911
Court Square avenue,	Court to Elm street,	Sheet asphalt,	193	503	1897
Court Square avenue,	Court to Elm street,	Brick,	——	330	1897
Cross street,	Main to Willow,	Wood blocks,	316	897	1913
Crossett lane,	Main to Willow,	Wood blocks,	310	738	1919
Cypress street,	At Fulton street,	Granite blocks,	31	115	1915
Dwight street,	State to Lyman,	Wood blocks,	2,566	17,846	1918
Dwight street,	Lyman to Liberty,	Brick,	399	1,955	1915
East Court street,	Main to Market,	Sheet (rock) asphalt,	117	297	1900
East Court street,	Market to Dwight,	Wood blocks,	294	740	1912
Eastern avenue,	State street to Wilbraham road,	Bitulithic,	84	340	1913
Elm street,	Main to Court Square avenue,	Sheet asphalt,	343	949	1897
Elm street,	Main to Court Square avenue,	Brick,	——	330	1897
Emery street,		Wood blocks,	611	2,068	1914
Ferry street,	Main street to foot of hill,	Bitulithic,	1,389	3,597	1910
Ferry street,	Foot of hill to Chestnut,	Granite blocks,	104	265	1915
Fulton street,	Cypress to Auburn,	Granite blocks,	1,505	9,073	1916
Fulton street,	East side at Emery,	Granite blocks,	——	534	1919
Harrison avenue,	Main to Market street,	Sheet asphalt,	210	816	1916
Harrison avenue,	Market to Dwight street,	Sheet asphalt,	377	1,439	1915
Harrison avenue,	Dwight to Chestnut street,	Granite blocks,	224	924	1915

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TABLE OF PERMANENT PAVEMENTS.—*Continued.*

Name.	Limits.	Material.	Length in feet.	Area in sq yds.	Year Laid.
Hayden alley,	Hayden to Andrew street,	Concrete,	183	292	1917
Hickory street,	Walnut to Eastern avenue,	Brick,	792	1,644	1917
Hillman street,	Dwight to Chestnut,	Granite blocks,	284	857	1915
Hubbard avenue,	Main to Willow street,	Wood blocks,	382	722	1915
King street,	Street Railway turnout,	Wood blocks,	317	1,023	1908
Liberty street,	Main street, easterly 311 feet,	Bitulithic,	311	1,335	1911
Liberty street,	Extension to foot of hill,	Wood blocks,	799	3,366	1915
Liberty street,	Foot of hill at Chestnut street,	Granite blocks,	306	1,272	1915
Liberty street,	Chestnut to Cass,	Brick,	1,399	3,848	1900
Liberty street,	Cass street to Heywood avenue,	Brick,	1,147	3,971	1901
Liberty street,	Heywood avenue to Armory street,	Brick,	2,030	7,260	1916
*Liberty street,	Chestnut to Armory	Sheet asphalt,	——	3,966	1921
Locust street,	At watering trough,	Brick,	——	50	1913
Locust street,	Main to Mill, between tracks,	Brick,	——	1,135	1913
Locust street,	Main to Mill,	Bitulithic,	826	3,153	1913
Lyman street,	East and west of Dwight street between tracks,	Granite blocks,	——	200	1915
Lyman street,	Dwight street intersection,	Wood blocks,	75	313	1918
Magazine street,	Worthington to Lincoln,	Grit asphalt,	961	3,992	1914
Main street,	Locust to Marble,	Brick,	840	4,381	1897
Main street,	Marble to William,	Brick,	1,762	8,307	1896
Main street,	Bliss to William, between tracks,	Wood blocks,	1,150	1,854	1906
Main street,	Bliss to Park, east side,	Wood blocks,	——	971	1916
Main street,	Park to William, east side,	Wood blocks,	——	——	1917
Main street,	Bliss to William, west side,	Wood blocks,	——	3,635	1917
Main street,	Bliss to State,	Brick,	241	1,355	1893
Main street,	State to Worthington,	Wood blocks,	1,899	10,798	1904

*Roadway widened 1921.

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TABLE OF PERMANENT PAVEMENTS.—*Continued.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Worthington to Hampden, west side,	Wood blocks,	382	1,183	1904
Main street,	Worthington to Lyman, east side,	Wood blocks,	——	1,137	1917
Main street,	Hampden to Lyman, west side,	Wood blocks,	153	600	1903
Main street,	Lyman to Liberty,	Wood blocks,	484	2,780	1903
Main street,	Liberty to Sharon, east side,	Wood blocks,	453	1,135	1903
Main street,	Liberty to Sharon, west side,	Wood blocks,	——	1,487	1907
Main street,	Sharon to Franklin,	Wood blocks,	509	2,103	1907
Main street,	Near Franklin, east side,	Brick,	36	144	1907
Main street,	Franklin to Carew, east side,	Brick,	1,302	4,605	1897
Main street,	Franklin to Greenwood, bet. tracks,	Brick,	——	360	1914
Main street,	Emery to Seventh, west side,	Wood blocks,	1,105	3,203	1915
Main street,	Clinton to Sargeant, west side, between tracks,	Wood blocks,	——	511	1915
Main street,	Clinton to Carew, west side, between tracks and "Green,"	Concrete,	——	217	1915
Main street,	Seventh to Sargeant, west side,	Grit asphalt on old brick,	350	941	1914
Main street,	Crossing opposite Auburn street,	Brick,	——	163	1903
Main street, I. O.,	305 feet west of Oak street to east line of French Church,	Grit asphalt,	1,362	7,098	1915
Maple street,	North line of Avon place to Central street,	Grit asphalt,	242	1,028	1915
Maple street,	Central street, southerly,	Granite blocks,	50	180	1921
Mill street,	Locust street, easterly,	Brick,	——	511	1913
New street,		Concrete	348	850	1916
North street,	Liberty to Carew,	Bitulithic,	2,246	11,601	1914
North Main street,	Carew to Morgan,	Wood blocks,	789	4,194	1915
North Main street,	Morgan to Bancroft,	Wood blocks,	879	4,544	1909
North Main street,	Bancroft to Calhoun,	Wood blocks,	839	4,210	1910

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TABLE OF PERMANENT PAVEMENTS.—*Continued*.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
North Main street,	Calhoun to Grove,	Wood blocks,	673	3,466	1911
North Main street,	Grove to Thomas,	Wood blocks,	691	2,536	1912
North Main street,	Grove to Thomas, between rails,	Wood blocks,	——	1,012	1913
North Main street,	Thomas street to Chicopee line,	Wood blocks,	3,266	16,151	1913
North Main street,	At Wason avenue,	Brick,	——	196	1908
Oak street, I. O.,	Main to south line of Worcester street,	Grit asphalt,	364	1,684	1916
Orange street,	Intersection of White street,	Brick,	85	370	1914
Park street,	Main to Willow,	Wood blocks,	326	1,014	1915
Pearl street,	Spring to Byers,	Granite blocks,	244	741	1918
Plainfield street,	Sargeant street, westerly,	Brick,	1,456	8,690	1902
Plainfield street,	Extension to B. & M. R. R.,	Brick,	254	1,559	1916
Plainfield street,	B. & M. R. R., northerly (includes 188 feet in West street),	Granite blocks,	396	3,073	1916
Plainfield street,	Granite blocks to Wason avenue,	Grit asphalt,	4,939	19,477	1917
Post Office square,	Worthington to Fort street,	Concrete,	80	111	1914
Pynchon street,	Main to Water,	Bitulithic,	870	2,866	1911
Railroad street,	Water street, easterly,	Granite blocks,	326	1,246	1915
Sanford street,	Main to Market,	Sheet asphalt,	102	207	1900
Sanford street,	Market to Dwight,	Wood blocks,	246	806	1912
Spring street,	State to Worthington,	Bitulithic,	1,820	6,133	1913
Spring street,	Worthington to Lyman,	Granite blocks,	507	1,739	1913
State street,	Water street, easterly,	Wood blocks,	360	1,321	1914
State street,	Main street, westerly,	Wood blocks,	598	2,357	1909
State street,	Main to Dwight,	Wood blocks,	478	2,403	1908
State street,	At Dwight street,	Wood blocks,	——	79	1914
State street,	Dwight to Maple,	Granite blocks,	344	1,936	1914
State street,	Maple to Spring,	Granite blocks,	1,140	6,606	1920
State street,	Spring street to wood block,	Granite blocks,	1,281	8,797	1919

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TABLE OF PERMANENT PAVEMENTS.—*Continued.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
State street,	Walnut street, westerly,	Wood blocks,	527	4,063	1914
State street,	Federal to Oak,	Brick,	847	4,590	1897
State street,	At Walnut street,	Brick,	——	278	1908
State street,	At St. James avenue,	Brick,	——	183	1907
State street,	Oak to Stebbins,	Wood blocks,	762	3,031	1909
State street,	Stebbins to Terrence,	Wood blocks,	386	1,497	1910
State street,	Terrence to Westminster,	Wood blocks,	639	3,256	1911
State street,	Oak to Westminster, widening to north and south curb, from Oak to Terrence, and between tracks Terrence to Westminster,	Wood blocks,	——	4,854	1913
State street,	Westminster to Buckingham,	Wood blocks,	360	2,520	1913
State street,	Buckingham to Sherman,	Bitulithic,	477	5,596	1913
State street,	Sherman to Catharine,	Grit asphalt,	190	782	1915
State street,	Catharine to N. Y., N. H. & H. R. R.,	Wood blocks,	633	3,112	1915
State street,	N. Y., N. H. & H. R. R. to Amaron street,	Wood blocks,	1,106	4,271	1912
State street,	N. Y., N. H. & H. R. R. to Amaron, between rails,	Wood blocks,	——	1,490	1913
State street,	Amaron to Pine Point,	Hassam concrete,	6,860	36,871	1914
St. James avenue,	175 feet west of Dartmouth to 175 feet east of Princeton,	Grit asphalt,	1,182	6,198	1917
St. James avenue,	N. Y., N. H. & H. R. R. to B. & A. R. R.,	Hassam concrete,	1,945	9,195	1913
St. James avenue,	B. & A. R. R. to Chicopee line,	Concrete,	6,547	13,094	1915
Stockbridge street,	Main to Willow,	Wood blocks,	317	770	1914
Summer street,	Armory street, westerly,	Old granite blocks,	376	1,306	1914
Sumner avenue,	Oakland street to "X," between tracks,	Grit asphalt,	——	2,073	1915
Sumner avenue,	Oakland street to "X," south side,	Grit asphalt,	1,244	3,053	1915

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TABLE OF PERMANENT PAVEMENTS.—*Continued.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Sumner avenue,	Intersection of Belmont avenue,	Brick,	——	83	1914
Taylor street,	Dwight to Chestnut,	Wood blocks,	396	1,465	1914
Townsley avenue,		Bitulithic,	142	214	1908
Union street,	Main to Willow,	Wood blocks,	331	1,110	1914
Vernon street,		Bitulithic,	821	2,047	1911
Walnut street,	State to Union, west side,	Brick,	——	721	1899
Walnut street,	Union to Pine, west side,	Brick,	——	1,446	1900
Walnut street,	Front of Engine house,	Wood blocks,	——	98	1914
Walnut street,	State to Pendleton ave., east side,	Wood blocks,	1,521	2,168	1914
Walnut street,	State to Pendleton ave., between rails,	Wood blocks,	——	753	1913
Walnut street,	Pendleton ave. to King street, between rails,	Grit asphalt,	——	246	1915
Walnut street,	Pendleton avenue to Six Corners,	Wood blocks,	2,068	6,573	1915
Walnut street,	Six Corners to top of hill,	Grit asphalt,	1,066	3,485	1914
Water street,	Hampden to Cypress,	Granite blocks,	879	5,971	1915
West street,	North of Park,	Grit asphalt,	437	1,332	1916
West street,	South of Park,	Grit asphalt,	106	881	1916
West street,	At B. & M. Bridge (see Plainfield street),	Granite blocks,			
White street,	Near Allen to Orange, between rails,	Brick,	1,610	2,400	1902
Wilbraham road,	Winchester street to N. Y., N. H. & H. R. R.,	Bitulithic,	657	3,255	1913
William street,	Main to Dale,	Concrete,	593	1,898	1914
Willow street,		Wood blocks,	1,189	3,443	1912
Worthington street,	Water street to Broadway,	Wood blocks,	299	1,061	1909
Worthington street,	Main to Dwight,	Sheet asphalt on old brick,	747	2,590	1917
Worthington street,	Chestnut street to Fairbanks place,	Brick,	630	1,396	1901
Worthington street,	Dwight to east line Chestnut,	Sheet asphalt,	410	1,509	1921

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TABLE OF PERMANENT PAVEMENTS.—*Concluded.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Worthington street,	Chestnut street to Fairbanks place, north side,	Wood blocks,	——	897	1917
*Worthington street,	Fairbanks place to east line of Spring street,	Brick,	269	1,003	1903
Worthington street,	At Sackett place,	Wood blocks,	265	886	1908
Worthington street,	Federal to Armory,	Wood blocks,	374	1,312	1908

*Relaid on north side with old material, 1917.

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TABLE OF PERMANENT PAVEMENT.

RECAPITULATION.

	Miles.	Square yards.
Wood blocks,	6.419	157,962
Brick,	3.424	75,890
Concrete,	5.514	68,823
Hassam concrete,	1.667	46,066
Bitulithic,	2.292	49,209
Grit asphalt,	3.339	71,779
Grit asphalt on brick,	.066	941
Sheet asphalt,	.527	13,890
Sheet asphalt on brick,	.141	2,590
Granite blocks,	2.222	58,776
Asphalt blocks,	.036	712
Total,	25.653	546,638

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STREET CONSTRUCTION.

BITUMINOUS MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
*Belvidere street,	Belmont avenue to Fountain place,	615	2,143	$36.33	$315.35	$2,943.34	$1.37
*Berkshire avenue,	Chestnut street to Page boulevard,	3,751	14,459	439.77	3,197.93	29,847.35	2.06
Bristol street,		1,457	4,928	145.71	1,147.09	10,706.13	2.17
*Broadway extension,	Pynchon to Vernon,	227	788	25.20	170.97	1,595.75	2.02
*Carew street,	Liberty school to St. James avenue,	3,611	10,834	200.95	1,939.35	18,100.69	1.67
*Carew street,	By-pass to Armory,	1,750	7,872	213.40	1,429.58	13,342.79	1.69
*Carew street,	Prospect to present tar macadam,	436	2,002	41.67	330.84	3,087.84	1.54
*‡Carew street,	Liberty to Judson,	2,074	6,539	34.29	729.27	6,806.55	2.05
Cleveland street,	Armory to Liberty,	1,059	3,530	60.57	610.55	5,698.44	1.61
*Dexter street,	Knox to Pine,	683	2,310	40.59	314.90	2,939.07	1.27
*Dover street,	Main to Chestnut,	803	2,677	85.87	597.31	5,574.95	2.08
*‡Eloise street,	Sumner avenue to Paridon street,	871	3,017	18.39	334.92	3,125.95	4.29
*‡Kimberly avenue,	White to Allen,	1,655	5,376	3.37	20.28	189.25	1.82
*Ledyard street,	Armory to Liberty,	577	1,947	32.61	305.69	2,853.02	1.47
*Los Angeles avenue,	Hamburg street to Milford street,	669	2,080	58.53	494.75	4,617.65	2.22
*Massasoit place,		392	1,467	31.71	266.65	2,488.70	1.70
*Melrose street,	Walnut to Eastern avenue,	1,019	2,849	55.95	459.31	4,286.94	1.50
*Prospect street,	Chestnut to Massasoit,	570	1,900	44.28	325.68	3,039.69	1.60
*Stafford street extension,		2,317	7,723	1,074.16	4,497.95	41,980.76	5.44
*Suffolk street,	Wilbraham road to Marlborough,	789	2,455	47.19	500.30	4,669.41	1.90
*†¶Taylor street extension,	Chestnut to Spring,	....	....	221.68	1,066.76	9,956.43	....
*Trinity terrace,		488	3,124	78.18	488.95	4,563.52	1.46
*‡Washington street,	Woodlawn to Commonwealth avenue,	962	3,241	16.17	252.32	2,354.95	2.57
*Wigwam place,		292	1,011	31.19	260.37	2,430.12	2.40
*‖Woodlawn street,	Washington to Blake,	1,212	4,397	75.66	849.58	7,929.30	1.80
Totals,		28,279	98,669	$3,113.42	$20,906.65	$195,128.59	....

* Denotes asphalt penetration.
† Includes cost of wrecking buildings.
‡ Denotes completion of 1920 work, unit cost includes 1920 work.
¶ Denotes incomplete work.
‖ Denotes completion of 1920 work, cost includes only 1921 work.

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STREET CONSTRUCTION.

CINDERS.

Street.	Limits.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
Dwight road,.....	.....	4,355	14,517	$426.45	$1,937.16	$18,080.12	$1.24

GRAVEL.

*Dickinson street extension,.....	.....	....	....	$165.80	$537.59	$5,017.56	....

SHEET ASPHALT.

North street extension,.....	Cumberland to Dover,.....	202	782	$34.99	$282.59	$2,637.57	$3.37
†Pearl street widening,.....	Southeast corner Chestnut,.....	....	295	48.59	253.18	2,363.04	....
Totals,.....	.....	....	1,077	$83.58	$535.77	$5,000.61	....

* Denotes incomplete work.

† Includes turfing lawn, removing fence, resetting curb, relaying sidewalk.

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STREET CONSTRUCTION.

MACADAM RECAPITULATION.

	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost.
Tar macadam,.....	2,516	8,458	$1.94	$16,404.57
Tar macadam completion of 1920 work,..	.....	.....	.....	2,354.95
Asphalt macadam,....	20,201	72,038	2.17	156,290.89
Asphalt macadam completion of 1920 work,.....	.....	.....	.....	10,121.75
Asphalt macadam incomplete,.....	.....	.....	.....	9,956.43
Total,.....	22,717	80,496	.....	$195,128.59

CINDERS.

	4,355	14,517	$1.24	$18,080.12

GRAVEL.

Incomplete,.....	.....	.....	.....	$5,017.56

SHEET ASPHALT.

	202	782	$3.37	$2,637.57
Includes turfing lawn, removing fence, resetting curb, relaying sidewalk,.....	.....	.....	.....	2,363.04
Total,.....	.....	....	.....	$5,000.61

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STREET CONSTRUCTION.

PAVING RECAPITULATION.

	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost.
Granite block,.....	1,160	4,264	$7.03	$29,978.11
Granite block includes resetting curb and laying sidewalk,....	.....	.....	.....	653.17
Granite block completion of 1920 work,...	.....	.....	.....	1,137.57
Sheet asphalt,.....	279	1,400	4.29	6,003.66
Sheet asphalt includes resetting curb and laying sidewalk,....	.....	.....	.....	17,059.70
Total,.....	.....	.....	.....	$54,832.21

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TABLE OF SURFACE PAVEMENT.

Name	Limits.	Material	Length in feet.	Area in sq. yds.
‡Abbe avenue,	Bridge approach,	Bituminous macadam,	872	2,325
Abbe avenue,	Fisk avenue to Plainfield street,	Bituminous macadam,	658	2,217
Abbe avenue,	Plainfield to river,	Bituminous macadam,	934	3,113
Acushnet avenue,		Water-bound macadam,	1,088	3,385
Adams street,		Bituminous concrete,	1,020	3,505
Agawam street,		Bituminous concrete,	230	809
‡Albany street,	Land of Hampden Paint Co. to Glen road,	Bituminous macadam,	1,400	4,334
Albemarle street,		Bituminous macadam,	1,493	4,977
Alden street,	Walnut street to Eastern avenue,	Bituminous concrete,	1,349	4,533
Alden street,	Eastern avenue to Woodbine avenue,	Tar top,	1,818	4,899
Alderman street,		Bituminous macadam,	1,325	5,444
Alexander street,		Water-bound macadam,	414	1,380
Alfred street,		Bituminous macadam,	485	1,617
Allen street,	White street to N. E. R. R.,	Water-bound macadam,	3,573	1,191
Allen street,	Oakland to White,	Tar top,	444	1,439
Allendale street,		Water-bound macadam,	663	2,094
Amaron street,		Bituminous macadam,	408	1,475
Amherst street,	Harvard to Monmouth,	Water-bound macadam,	1,233	4,069
Andrew street,	State to Dawes,	Tar top,	1,290	4,273
Arbor street,		Bituminous macadam,	442	1,243
Arch street,	Main street, westerly,	Water-bound macadam,	410	1,366
Arch street,	Extension to Birnie avenue,	Bituminous macadam,	293	1,002
Armory street,	B. & A. R. R. to Napier street,	Bituminous macadam,	294	1,097
Armory street,	Napier street to top of hill,	Water-bound macadam,	945	2,909
Armory street,	Top of hill to Liberty street,	Bituminous macadam,	386	1,272
Armory street,	Liberty to Carew,	Bituminous concrete,	1,561	5,351
Armory street,	Carew to Springfield,	Bituminous macadam,	4,267	14,406
Ashley street,		Sheet asphalt,	1,385	4,696

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Ashmun street,	Central to Adams,	Bituminous macadam,	266	904
Atwater terrace,		Water-bound macadam,	1,000	3,333
Auburn street,		Sheet asphalt,	782	1,996
Autumn street,		Bituminous concrete,	206	531
†Avon place,		Water-bound macadam,	711	2,924
Bailey square,	See Locust street,	Water-bound macadam,	——	——
Bancroft street,	Main to North,	Bituminous macadam,	884	2,976
Bancroft street,	North to Chestnut,	Water-bound macadam,	551	1,889
Banks place,		Water-bound macadam,	195	464
Bartlett street,		Bituminous macadam,	571	2,210
Bay street,	St. James avenue to Catharine street,	Bituminous concrete,	2,772	9,718
Bay street,	N. E. R. R. to Cambridge street,	Tar top,	416	1,387
Bay street,	Cambridge to Sycamore,	Bituminous macadam,	684	2,360
Beaumont street,	Dickinson street to Belmont avenue,	Water-bound macadam,	689	2,295
Beech street,		Water-bound macadam,	528	1,303
Beechwood street,	Sumner avenue to Spruceland avenue,	Water-bound macadam,	501	1,670
‡Belmont avenue,	Sumner avenue to White street,	Bituminous macadam,	3,634	16,877
***Belmont avenue,	Sumner avenue to White street,	Sheet asphalt,	——	2,557
Belmont place,		Water-bound macadam,	221	669
‡Belvidere street,	Belmont avenue to Fountain place,	Bituminous macadam,	615	2,143
Benton street,		Bituminous macadam,	1,485	5,131
Berkeley street,		Water-bound macadam,	453	1,510
Berkshire avenue, I.O.,	State to Oak street, between tracks,	Water-bound macadam,	——	**31,291
‡Berkshire ave., I. O.,	Page boulevard to Chestnut street,	Bituminous macadam,	3,751	14,459
Berkshire street, I.O.,	At Chestnut,	Water-bound macadam,	75	1,124

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Berkshire street, I.O.,	Chestnut to Oak,	Bituminous macadam,	1,325	5,409
Birnie avenue,	Plainfield to Greenwich,	Bituminous macadam,	1,667	5,589
Birnie avenue,	Greenwich street to Wason avenue,	Bituminous concrete,	3,419	14,328
Blake Hill,		Water-bound macadam,	347	628
Bliss street,	Water street to N. Y., N. H. & H. R. R.,	Water-bound macadam,	266	852
Bloomfield street,		Bituminous macadam,	1,939	6,614
Bond street,	Main street to foot of hill,	Tar top,	1,520	5,076
Bond street,	Foot of hill to Chestnut street,	Water-bound macadam,	49	154
Bowdoin street,	St. James avenue to Lincoln street,	Bituminous concrete,	253	945
Bowdoin street,	Lincoln street to Ingersoll Grove,	Water-bound macadam,	1,691	5,532
Bowles street,	Bay to McKnight,	Water-bound macadam,	750	2,500
Bowles street,	McKnight to Pease,	Bituminous macadam,	400	1,331
Boylston street,	Cypress to Emery,	Sheet asphalt,	568	1,202
Boylston street,	Emery to Clinton,	Sheet asphalt,	299	731
Bradford street,	Plainfield to Fulton,	Water-bound macadam,	741	2,472
Bridge street,	Main street westerly 493',	Bituminous concrete,	493	1,746
Bridge street,	Water street to Toll bridge,	Granite blocks on sand,	249	713
Bristol street,		Bituminous macadam,	1,457	4,928
Broad street,		Water-bound macadam,	959	3,177
Broadway,		Bituminous macadam,	705	3,219
Brookline avenue,		Water-bound macadam,	615	2,050
Brown street,		Bituminous macadam,	508	1,687
Bryant street,		Bituminous macadam,	897	2,990
Buckingham place,		Water-bound macadam,	275	916
Buckingham street,		Water-bound macadam,	2,006	6,678
Burlington street,		Bituminous macadam,	352	1,096
Burr street,		Bituminous macadam,	840	2,339
Butler street,		Bituminous macadam,	1,515	2,862

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Byers street,	State to Frost,	Water-bound macadam,	480	1,193
Calhoun street,		Water-bound macadam,	1,129	3,435
Cambridge street,		Bituminous macadam,	1,564	4,899
Carew street,	Main to Chestnut,	Bituminous macadam,	1,620	5,463
‡Carew street,	Chestnut to "Driscoll's by-pass,"	Bituminous macadam,	1,545	6,761
‡Carew street,	"Driscoll's by-pass" to Prospect street,	Bituminous macadam,	436	2,002
Carew street,	"Driscoll's by-pass,"	Bituminous macadam,	700	4,499
‡Carew street,	"Driscoll's by-pass" to Armory street,	Bituminous macadam,	1,750	8,772
Carew street,	Armory to Liberty,	Bituminous macadam,	1,632	7,382
Carew street,	Liberty to Judson,	Bituminous macadam,	2,074	6,539
‡Carew street,	Judson to St. James boulevard,	Bituminous macadam,	3,068	10,083
‡Carew street,	St. James boulevard to St. James avenue,	Bituminous macadam,	979	2,177
Caseland street,		Bituminous macadam,	1,154	5,419
Cass street,	Liberty to Franklin,	Tar top,	623	1,937
Cass street,	Franklin to Butler,	Sheet asphalt,	1,140	3,698
Catharine street,	Bay to Dartmouth,	Sheet asphalt,	151	515
Cedar street,		Tar top,	1,725	5,992
Central street,	Main to Ashmun,	Bituminous concrete,	885	2,809
Central street,	Ashmun to Maple,	Water-bound macadam,	476	1,285
Central street,	Cedar to Spruce,	Sheet asphalt,	1,572	5,385
Central street,	Spruce to Mill,	Grit asphalt,	1,357	4,660
Centre street, I.O.,	Cedar street, easterly,	Bituminous macadam,	382	1,273
Chapel street,		Bituminous macadam,	443	1,397
†Chapin terrace,	Chestnut to Marvin,	Water-bound macadam,	601	3,112
Chapin terrace,	Marvin street to 125′ east of Narragansett,	Bituminous macadam,	466	2,729
Charles street,	Liberty to Franklin,	Bituminous concrete,	37	80
Charles street,	Liberty to Franklin,	Sheet asphalt,	589	1,860
Charles street,	Liberty street to land of B. & A. R. R.,	Granite blocks on sand,	150	376

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Chase avenue,		Water-bound macadam,	583	1,943
Cherryvale avenue,		Water-bound macadam,	687	2,290
Chester street,		Bituminous macadam,	910	2,702
Chestnut street,	State street to top of hill,	Glutrin-bound macadam,	207	552
Chestnut street,	Top of hill to Edwards street,	Bituminous concrete,	599	1,901
Chestnut street,	Edwards street to Harrison avenue,	Rocmac,	173	590
Chestnut street,	Harrison avenue to Pearl street,	Bituminous concrete,	281	2,630
Chestnut street,	Bridge to Worthington,	Bituminous concrete,	441	
Chestnut street,	Worthington to Linden,	Granite blocks on sand,	2,368	8,389
Chestnut street,	Jefferson avenue to Springfield street, west side,	Bituminous macadam,	1,840	4,388
Chestnut street,	Jefferson avenue to Springfield street, east side,	Bituminous macadam,	——	4,604
Chestnut street,	Montmorenci to Springfield,	Water-bound macadam,	——	**2,908
Chestnut street,	Springfield to Eagle street,	Tar top,	930	2,754
Church street,		Tar top,	832	2,579
Churchill street,		Water-bound macadam,	575	1,919
City Hall alley,	Pynchon to Court,	Bituminous macadam,	275	699
Clantoy street,		Bituminous macadam,	1,251	4,224
Clarendon street,	Bay street to Dartmouth terrace,	Water-bound macadam,	1,592	6,038
Clark street,		Water-bound macadam,	619	1,100
Cleveland street,		Bituminous macadam,	1,059	3,530
Clifford street,		Bituminous macadam,	449	1,497
Clifton avenue,		Bituminous macadam,	518	1,140
Cliftwood street,		Bituminous macadam,	458	1,163
Clinton street,		Bituminous concrete,	672	1,813
Clyde street,		Bituminous macadam,	460	1,329
College street,	State street to Wilbraham road,	Water-bound macadam,	527	1,522
College street,	State street to Acorn street,	Bituminous macadam,	1,935	6,731
Collins street,		Bituminous macadam,	519	1,571

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TABLE OF SURFACE PAVEMENT.—CONTINUED

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Colton street,	Wilbraham road to Union street,	Bituminous concrete,	772	1,970
Colton street,	Union to Beacon,	Bituminous macadam,	848	2,627
Commonwealth ave.,	Belmont avenue to Glenwood street,	Bituminous macadam,	1,094	3,506
Concord terrace,		Bituminous macadam,	339	1,507
Congress street,	Main to North,	Bituminous concrete,	932	2,386
Congress street,	North street to foot of hill,	Bituminous concrete,	314	803
‡Congress street,	Foot of hill to Chestnut,	Bituminous macadam,	241	616
Continental avenue,		Bituminous macadam,	453	1,510
Converse street,		Bituminous macadam,	453	1,409
Coomes street,		Bituminous macadam,	429	1,223
Cornell street,		Water-bound macadam,	1,283	4,275
Cortland street,		Bituminous macadam,	650	2,167
Crane street,		Bituminous macadam,	416	1,455
Crestwood street,		Bituminous macadam,	595	1,741
Cross street,	Willow to Maple,	Water-bound macadam,	608	1,416
Crystal avenue,		Water-bound macadam,	930	3,100
Cumberland street,	Main to North,	Bituminous macadam,	372	1,240
Cumberland street,	North to Chestnut,	Water-bound macadam,	426	1,420
Cypress street,	Main to Fulton,	Granite blocks on sand,	644	2,433
Dale street,		Sheet asphalt,	828	2,159
Dartmouth street,		Sheet asphalt,	1,133	5,188
Dartmouth terrace,	Cornell street, southerly,	Water-bound macadam,	488	2,544
Dartmouth terrace,	Worthington to Clarendon, west roadway,	Bituminous macadam,	411	939
Dawes street,		Bituminous macadam,	1,237	4,125
Daytona street,		Bituminous macadam,	590	1,966
Demond avenue,		Water-bound macadam,	859	2,863
‡Dexter street,		Bituminous macadam,	683	2,310
Dickinson street,	Between tracks on hill,	Bituminous macadam,	692	354

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Dickinson street,	Bailey square to Marengo Park,	Water-bound macadam,	761	3,733
Dickinson street,	Marengo Park to the "X,"	Bituminous concrete,	3,122	16,402
Dickinson street,	"X" to Olmstead Drive,	Bituminous macadam,	2,668	11,215
Donald street,		Bituminous macadam,	441	1,468
Dorchester street,		Water-bound macadam,	567	1,887
Douglas street,		Bituminous macadam,	532	1,775
‡Dover street,		Bituminous macadam,	803	2,677
Dresden street,		Bituminous macadam,	748	2,489
Dunmoreland street,	Wilbraham road to King street,	Bituminous macadam,	2,105	7,049
Dwight st. extension,	Adams to Marble,	Bituminous macadam,	826	4,878
Eagle street,		Tar top,	568	1,894
East Hooker street,		Water-bound macadam,	679	1,786
Eastern avenue,	Wilbraham road to King street,	Bituminous concrete,	2,052	7,199
Eastern avenue,	King to Alden street,	Tar top,	1,257	4,460
Eastern avenue,	Alden to Hickory street,	Bituminous concrete,	1,257	4,372
Edwards street,		Water-bound macadam,	675	2,219
‡Eldridge street,		Bituminous macadam,	544	1,642
Elliott street,		Bituminous concrete,	1,007	3,342
Elm street,	Court Square avenue to Water street,	Bituminous concrete,	606	2,076
Elm street,	Water street to N. Y., N. H. & H. R. R.,	Bituminous macadam,	179	387
‡Elm street,	Water street to N. Y., N. H. & H. R. R.,	Water-bound macadam,	64	221
Elmwood street,		Sheet asphalt,	806	2,509
‡Eloise street,		Bituminous macadam,	871	3,017
Essex street,	Main to North,	Tar top,	891	2,871
Essex street,	North to foot of hill,	Bituminous concrete,	454	1,462
Essex street,	Foot of hill to Chestnut street,	Bituminous macadam,	205	661
Euclid avenue,		Water-bound macadam,	1,169	3,896
Everett street,		Water-bound macadam,	1,500	4,859
Fairfield street,		Water-bound macadam,	882	2,940

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Farnsworth street,	Hamburg street, easterly, 20′ wide,	Water-bound macadam,	513	1,710
Farnsworth street,	Extension to Chicopee line,	Bituminous macadam,	882	2,983
Federal street,	At Pearl street,	Bituminous concrete,	124	464
Federal street,	Pearl to Summer,	Water-bound macadam,	949	3,814
‡Firglade avenue,	Sumner avenue to Pineywoods avenue,	Bituminous macadam,	1,000	3,413
Firglade avenue,	Pineywoods avenue to Washington boulevard,	Bituminous macadam,	520	1,733
‡Fisk avenue,		Bituminous macadam,	1,682	7,532
Florence street,	Pine to Hancock,	Water-bound macadam,	1,582	4,346
Florence street,	Hancock to Walnut,	Bituminous macadam,	281	927
Florentine Gardens,		Water-bound macadam,	706	3,501
Florida street,	Bay street to St. James avenue,	Tar top,	543	1,811
Florida street,	St. James avenue to Ingersoll Grove,	Tar top,	1,653	5,087
Forest street,		Water-bound macadam,	784	2,502
Forest Park avenue,	Sumner avenue to Pineywoods,	Bituminous macadam,	832	3,015
Forest Park avenue,	Sumner avenue to Forest street,	Water-bound macadam,	752	3,846
Forest Park avenue,	Forest st. to Fort Pleasant ave., 22½′ wide,	Water-bound macadam,	1,760	4,475
Fort street,		Granite blocks on sand,	670	1,770
Fort Pleasant avenue,	Mill street to Chase avenue and Warner street to Sumner avenue,	Water-bound macadam,	1,793	7,325
Fort Pleasant avenue,	East side Mill street, southerly,	Tar top,	——	3,000
Fort Pleasant avenue,	Belmont to Sumner avenue, westerly car track,	Bituminous macadam,	——	2,338
Fort Pleasant avenue,	Chase avenue to Warner street,	Tar top,	1,001	7,065
Foster street,		Water-bound macadam,	740	2,034
Franklin street,	Main to Chestnut,	Sheet asphalt,	1,513	5,310
Franklin street,	Chestnut to Charles,	Sheet asphalt,	307	1,061
Franklin street,	Charles to Webster,	Water-bound macadam,	1,733	5,805
Franklin street,	Webster to Genesee, 20′ wide,	Water-bound macadam,	1,139	3,797
Fremont street,		Bituminous concrete,	780	2,622

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Fulton street,	Plainfield to Auburn,	Tar top,	1,960	7,640
Fulton street,	At Plainfield,	Water-bound macadam,	267	890
Gardner street,	Main to Water,	Bituminous concrete,	461	1,545
Gardner street,	Water to Hanover,	Water-bound macadam,	653	2,168
Garfield street,		Bituminous concrete,	1,380	4,721
Genesee street,	Liberty to Warwick,	Bituminous macadam,	644	2,423
Genesee street,	Liberty to Franklin, 20′ wide,	Water-bound macadam,	276	821
Genesee street,	Franklin to Dunn,	Bituminous macadam,	285	1,026
George street,	Maple street, westerly,	Bituminous macadam,	171	647
George street,	Extension to Pine street,	Bituminous concrete,	358	1,117
Gordon street,		Bituminous macadam,	541	2,066
Governor street,		Bituminous macadam,	1,405	4,683
‡Grace street,		Bituminous macadam,	347	1,157
Grant street,		Water-bound macadam,	577	1,603
Granville street,		Bituminous macadam,	453	1,358
Gray's avenue,		Sheet asphalt,	568	1,325
Greenacre square,		Water-bound macadam,	415	856
Greene street,		Water-bound macadam,	1,347	4,490
Greenleaf street,		Water-bound macadam,	740	3,098
Greenwich street,		Bituminous macadam,	630	1,974
Greenwood street,	Main to North,	Bituminous concrete,	930	3,110
Greenwood street,	North to foot of hill,	Bituminous concrete,	388	1,295
‡Greenwood street,	Foot of hill to Chestnut,	Bituminous macadam,	187	623
Grenada terrace,		Bituminous macadam,	1,095	5,820
Grosvenor street,		Water-bound macadam,	738	2,286
Grove street,		Water-bound macadam,	612	1,734
Grover street,		Bituminous macadam,	1,343	4,156
Hall street,		Water-bound macadam,	992	3,307

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Hamburg street,	Springfield street to angle 20′ wide,	Water-bound macadam,	574	1,786
Hamburg street,	Angle to Silver street,	Bituminous macadam,	184	647
Hampden street, I. O.,	Oak to Pine,	Bituminous macadam,	517	2,068
Hampden street,		Bituminous concrete,	606	2,360
Hancock street,	State to Walnut,	Tar top,	3,231	11,396
Hancock street,	Walnut to Clark,	Water-bound macadam,	885	2,949
Hancock street,	Clark to Central,	Bituminous macadam,	510	2,024
Harriet street,		Water-bound macadam,	816	2,720
Harvard street,		Water-bound macadam,	1,565	5,206
Hawley street,		Bituminous macadam,	368	1,226
Hawthorne street,		Water-bound macadam,	540	1,374
Hebron street,		Water-bound macadam,	698	2,204
Herman street,		Bituminous macadam,	540	1,626
Heywood street,		Water-bound macadam,	250	833
Hiawatha street,		Bituminous macadam,	481	1,709
Hickory street,	Eastern avenue to Sheffield street and Alden street to Carlisle brook,	Water-bound macadam,	3,918	9,945
Hickory street,	N. Y., N. H. & H. R. R. to Alden street,	Bituminous macadam,	1,080	2,573
High street,	Maple to School,	Tar top,	763	1,926
High street,	School to Walnut,	Water-bound macadam,	1,800	3,618
Hillman street,	Main to Dwight,	Bituminous concrete,	648	2,025
Hollywood street,		Bituminous macadam,	736	2,513
Holyoke street,		Sheet asphalt,	739	1,888
Home street,		Bituminous macadam,	761	2,674
Homer street,		Water-bound macadam,	582	1,940
Horace street,		Bituminous macadam,	770	2,557
Howard street,	Main to Water,	Bituminous concrete,	944	3,171
Howard street,	Water street to railroad,	Water-bound macadam,	333	1,110

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Hubbard avenue,	Willow to Dale,	Sheet asphalt,	190	359
Huntington street,		Tar top,	642	2,018
Hyde avenue		Bituminous macadam,	943	3,151
Ingersoll Grove,		Water-bound macadam,	1,395	4,650
Ingraham avenue,		Water-bound macadam,	258	462
Ionia street,		Bituminous macadam,	724	2,092
Irvington street,		Bituminous macadam,	792	2,840
‡Itendale street,		Bituminous macadam,	671	2,000
James street,		Water-bound macadam,	928	2,356
Jasper street,		Water-bound macadam,	983	3,410
Jefferson avenue,		Water-bound macadam,	1,275	6,375
Jenks street,		Bituminous macadam,	388	1,146
John street,		Water-bound macadam,	640	2,136
Keith street,		Water-bound macadam,	1,107	3,690
Kendall street,		Bituminous macadam,	914	2,779
Kenwood Park,		Water-bound macadam,	721	3,888
Kenwood terrace,		Bituminous macadam,	524	2,307
Kenyon street,	Oak Grove avenue to Acorn street,	Bituminous macadam,	1,046	3,057
Kibbe avenue,		Water-bound macadam,	213	710
‡Kimberly street,		Bituminous macadam,	1,655	5,376
King street,	Walnut to Logan,	Tar top,	2,396	7,951
King street,	Logan to N. Y., N. H. & H. R. R.,	Water-bound macadam,	172	533
King street,	N. Y., N. H. & H. R. R. to Westford avenue,	Bituminous macadam,	684	2,396
Knox street,		Bituminous macadam,	1,123	3,839
Ladd street,		Bituminous macadam,	499	1,772
Lafayette street,		Water-bound macadam,	568	1,865
Laurel street,		Bituminous macadam,	553	1,843
Lebanon street,		Tar top,	1,889	5,118

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
‡Ledyard street,		Bituminous macadam,	577	1,947
Leete street,		Bituminous macadam,	971	3,414
Leonard street,		Bituminous macadam,	414	1,225
Lenox street,		Bituminous macadam,	450	1,200
Lester street,		Bituminous macadam,	650	2,167
Lexington avenue,	Chestnut to Massasoit street,	Water-bound macadam,	622	1,659
Lexington street,	Massasoit street, easterly,	Bituminous macadam,	430	1,266
Leyfred terrace,		Water-bound macadam,	625	2,102
‡Liberty street,	Armory to Carew,	Bituminous macadam,	2,235	8,053
Liberty street,	Carew street to Chicopee road,	Bituminous macadam,	1,653	5,633
Liberty street,	Chicopee road to Chicopee line,	Water-bound macadam,	——	**8,025
Lillian street,		Water-bound macadam,	387	989
‡Lincoln street,	Magazine to Bowdoin,	Bituminous macadam,	374	1,462
Linden street,		Tar top,	1,285	5,139
Litchfield street,		Water-bound macadam,	384	1,280
Locust street,	Belmont avenue to Dickinson street (includes Bailey square),	Bituminous macadam,	3,068	10,279
Logan street,		Bituminous macadam,	1,167	3,980
Lombard street,		Grit asphalt,	590	1,670
Longfellow terrace,		Bituminous macadam,	600	3,197
Longhill street,	Main to Warner street (tar gutters),	Water-bound macadam,	1,537	6,665
Longhill street,	Warner street to Sumner avenue,	Water-bound macadam,	475	2,321
Longhill street,	Sumner avenue to Cherryvale street,	Water-bound macadam,	800	3,208
Longhill street,	Sumner avenue to Cherryvale street, west track,	Bituminous macadam,	——	715
Longhill street,	Cherryvale street to Washington boulevard,	Bituminous macadam,	540	3,404
Longhill street,	Pecousic boulevard, northerly,	Bituminous macadam,	335	1,523
†Longmeadow street,	Longhill street to Longmeadow line,	Water-bound macadam,	2,930	7,813
Longview street,		Bituminous macadam,	551	1,917

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Loring street,		Sheet asphalt,	717	2,311
‡Los Angeles street,	Hamburg to Milford,	Bituminous macadam,	669	2,080
Lowell street,		Water-bound macadam,	1,390	4,633
Lyman street,	Main to Chestnut,	Granite blocks on sand,	1,305	4,158
Lyman street,	Chestnut to Spring,	Granite blocks on sand,	731	3,044
Lyndale street,		Bituminous macadam,	1,059	3,530
Madison avenue,		Water-bound macadam,	529	1,657
Magnolia terrace,	Sumner avenue to Pineywoods avenue,	Water-bound macadam,	1,141	6,209
Magnolia terrace,	Pineywoods avenue to Washington boulevard,	Bituminous macadam,	312	1,832
Main street,	Locust street to Pecousic avenue,	Tar top,	1,573	7,524
Main street,	Pecousic avenue, southerly,	Water-bound macadam,	1,000	3,517
Main street, I. O.,	Front street to asphalt pavement,	Water-bound macadam,	698	2,411
Main street, I. O.,	Front street to asphalt paving,	Water-bound macadam,	——	**364
Main street, I. O.,	Asphalt to Wilbraham line,	Tar top,	4,399	24,852
Malden street,	Allen to Grand,	Bituminous macadam,	877	2,961
Manhattan street,		Bituminous macadam,	1,101	2,799
Maple court,		Bituminous macadam,	712	1,760
Maple street,	State street to Avon place,	Bituminous concrete,	1,914	7,167
Maple street,	Central street to top of hill,	Rocmac,	675	1,882
Maple street,	Top of hill to Pine street,	Bituminous concrete,	1,039	3,119
Maple street,	Pine to George,	Tar top,	387	1,142
Maple street,	George to Mill,	Water-bound macadam,	494	1,570
Mapledell street,		Water-bound macadam,	972	3,239
Maplewood terrace,	Ft. Pleasant ave. to Forest Park ave., south side,	Water-bound macadam,	1,301	3,075
Maplewood terrace,	Forest Park avenue to Riverview ter., north side,	Water-bound macadam,	——	1,874
Maplewood terrace,	Fort Pleasant ave. to Riverview ter., north side,	Bituminous macadam,	——	1,237
Marble street,	Main street to Dwight street extension,	Sheet asphalt,	581	1,949
Marble street,	Dwight street extension, easterly,	Water-bound macadam,	493	1,559

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TABLE OF SURFACE PAVEMENT.—CONTINUED

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Marengo Park,		Water-bound macadam,	1,869	6,230
Margaret street,	Main to Water,	Bituminous concrete,	844	2,861
Margaret street,	Water street to N. Y., N. H. & H. R. R.,	Water-bound macadam,	534	775
Marion street,		Bituminous macadam,	1,292	4,305
Market street,		Bituminous concrete,	968	2,271
‡Marlboro street,	State to Wilbraham road,	Bituminous macadam,	847	2,541
Marshall street,	Includes 103 yds. in Melrose,	Bituminous macadam,	836	2,748
Marvin street,	Chapin terrace to Pratt street,	Water-bound macadam,	430	1,440
‡Mason street,		Bituminous macadam,	661	2,203
Massachusetts avenue,		Bituminous macadam,	1,457	7,346
‡Massasoit place,		Bituminous macadam,	392	1,467
Massasoit street,	Carew to Prospect,	Tar top,	845	2,881
Massasoit street,	Prospect to 143′ north of Montmorenci street,	Bituminous macadam,	1,148	3,827
Mattoon street,	(Includes Salem street),	Bituminous concrete,	1,358	4,019
Maynard street,	State to Shattuck,	Bituminous macadam,	782	3,476
McKnight street,	Sherman to Bowles,	Water-bound macadam,	532	1,773
‡McKnight street,	Bowles to Marion,	Bituminous macadam,	275	955
Medford street,		Bituminous macadam,	624	1,941
‡Melrose street,	Walnut to Eastern avenue,	Bituminous macadam,	1,019	2,849
Merrick street,		Bituminous macadam,	326	1,021
Merwin street,		Tar top,	701	2,335
Middlesex street,	Wilbraham road to Marlborough street,	Bituminous macadam,	787	2,623
‡Mill street,	Main to Locust,	Bituminous macadam,	539	2,547
Mill street,	Locust to Pine,	Bituminous macadam,	975	3,864
‡Mill street,	Pine to Maple,	Bituminous macadam,	760	3,260
Mill street,	Maple to Mill River,	Bituminous concrete,	757	2,776
Mill street,	Mill River to Dickinson,	Water-bound macadam,	219	1,117
Mill street extension,	Pecousic avenue to Main street,	Bituminous macadam,	520	2,827

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Monmouth street,		Water-bound macadam,	1,168	4,000
Monroe street,	Hancock street to Eastern avenue,	Water-bound macadam,	1,345	3,736
Monroe street,	Eastern avenue to Colton street,	Bituminous macadam,	281	780
Montmorenci street,		Water-bound macadam,	620	2,067
Montpelier street,		Sheet asphalt,	232	773
Montrose street,		Bituminous macadam,	973	3,242
Moore street,		Bituminous macadam,	700	2,333
Mooreland street,		Bituminous macadam,	1,417	3,723
Morgan street,		Bituminous macadam,	849	2,924
Morningside park,	White street to Trinity terrace,	Bituminous macadam,	330	1,232
Morris street,		Water-bound macadam,	1,022	3,031
Mountainview street,		Water-bound macadam,	682	2,330
Mulberry street,	Maple to east side School street,	Bituminous concrete,	703	2,298
Mulberry street,	School to Union,	Water-bound macadam,	1,322	3,223
Murray Hill avenue,		Water-bound macadam,	600	2,000
Myrtle street,		Sheet asphalt,	491	1,114
Narragansett street,		Bituminous macadam,	1,272	4,364
Nelson street,		Bituminous macadam,	695	2,134
Niagara street,		Sheet asphalt,	330	1,138
Noble street,		Bituminous macadam,	439	1,268
Noel street,	Mill street, southeasterly,	Bituminous macadam,	870	2,886
Norfolk street,		Bituminous macadam,	824	3,160
North street,	Carew street to Jefferson avenue,	Tar top,	2,045	8,243
North street,	Jefferson avenue to Dover street,	Sheet asphalt,	1,857	6,860
Northampton avenue,	Wilbraham road to Beverly street,	Water-bound macadam,	1,229	4,096
Northampton avenue,	Beverly street to King street,	Bituminous macadam,	953	3,226
Norwood street,		Sheet asphalt,	925	2,674
Oak street,		Bituminous concrete,	1,356	4,462

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Oak street, I. O.,	Water to Main,	Water-bound macadam,	408	1,468
‡Oak street, I. O.,	Worcester to Berkshire,	Bituminous macadam,	697	3,323
Oak Grove avenue,		Bituminous macadam,	2,792	9,709
Oakland street,	Sumner avenue to Dickinson street,	Bituminous concrete,	1,565	7,075
Oakland street,	Dickinson to top of hill near Water Shops,	Bituminous concrete,	1,888	6,503
Oakland street,	Top of hill to Allen street,	Tar top,	515	1,573
Olive street,		Water-bound macadam,	478	1,248
Orange street,	Bailey square to Allen street,	Bituminous macadam,	4,027	15,702
Orchard street,	Plainfield street, westerly,	Water-bound macadam,	1,040	3,467
Orchard street,	Extension to river,	Bituminous macadam,	383	1,247
Orlando street,		Bituminous macadam,	735	2,250
Orleans street,		Water-bound macadam,	1,509	4,293
Ormond street,		Bituminous macadam,	365	1,222
Osgood street,		Water-bound macadam,	894	3,000
Oxford street,		Bituminous macadam,	663	2,219
Page boulevard,	St. James avenue to Berkshire avenue,	Bituminous macadam,	18,650	53,880
Palmer avenue,		Water-bound macadam,	991	3,177
Park street,	Foot of hill to Maple street,	Water-bound macadam,	539	1,052
Parkwood street,		Water-bound macadam,	450	1,500
Pasco road, I. O.,	Essex street, southerly,	Bituminous macadam,	611	2,475
Patton street,	Main to North,	Tar top,	868	3,007
Patton street,	North to foot of hill,	Bituminous concrete,	488	1,627
‡Patton street,	Foot of hill to Chestnut,	Bituminous macadam,	217	725
Pearl street,	Chestnut to Spring,	Bituminous concrete,	983	3,112
Pease street,		Bituminous macadam,	382	1,468
Pecousic avenue,	Gardner to Main street,	Bituminous macadam,	2,301	17,267
Pecousic avenue,	Main to Agawam, east roadway,	Bituminous macadam,	——	3,436
Pecousic avenue,	Main street to Leary's line,	Bituminous concrete,	2,691	8,727

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Pecousic avenue,	Leary's line to Longhill street,	Bituminous macadam,	1,420	3,313
Pendleton avenue,		Tar top,	2,586	6,467
Phoenix street,		Bituminous macadam,	602	2,101
‡Pine street,	Mill to Maple,	Bituminous macadam,	951	2,800
Pine street,	Maple to Walnut,	Bituminous concrete,	3,417	12,996
Pineywoods avenue,	Washington boulevard to Florentine Gardens,	Bituminous macadam,	490	1,633
Pineywoods avenue,	Florentine Gardens to Washington road,	Water-bound macadam,	1,273	4,243
Pineywoods avenue,	Washington road to Forest Park avenue,	Bituminous macadam,	329	1,097
Plainfield street,	Wason avenue to Chicopee line,	Bituminous macadam,	423	979
Pleasant street,		Tar top,	428	1,141
Plymouth street,		Water-bound macadam,	479	1,597
Pomona street,		Bituminous macadam,	882	3,157
Portland street,		Bituminous macadam,	613	2,042
†Pratt street,		Water-bound macadam,	600	2,000
Prince street,		Bituminous macadam,	327	1,098
Princeton street,	Bay to St. James avenue,	Sheet asphalt,	1,500	6,794
Princeton street,	St. James avenue to Cornell street,	Water-bound macadam,	276	425
‡Prospect street,	Chestnut to Massasoit,	Bituminous macadam,	570	1,900
Prospect street,	Massasoit to Carew,	Water-bound macadam,	817	2,996
Queen street,	Walnut to Hancock,	Bituminous macadam,	742	1,897
Quincy street,	Oak street to Eastern avenue,	Water-bound macadam,	2,704	7,780
Quincy street,	Eastern avenue to Colton street,	Bituminous macadam,	274	848
Railroad street,	Main street, westerly,	Granite blocks on sand,	176	500
Randolph street,	Sumner avenue to Forest Park avenue,	Water-bound macadam,	916	3,053
Reed street,		Water-bound macadam,	660	2,493
Revere street,		Bituminous macadam,	1,278	4,459
Richelieu court,		Bituminous macadam,	446	1,403
Ridgewood place,		Water-bound macadam,	537	1,193

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TABLE OF SURFACE PAVEMENT.—CONTINUED

Name.	Limits.	Material	Length in feet.	Area in sq. yds
Ridgewood terrace,		Water-bound macadam,	886	1,643
Ringgold street,		Water-bound macadam,	730	2,432
Riverview street,		Water-bound macadam,	625	2,094
Riverview terrace,	Ft. Pleasant ave. to Riverview st., north driveway,	Water-bound macadam,	281	721
Riverview terrace,	Fort Pleasant avenue to Maplewood terrace,	Bituminous macadam,	545	3,336
Robbins road,	Page boulevard to Athol Branch R. R.,	Bituminous macadam,	255	986
Rochelle street,		Bituminous macadam,	856	2,856
Roseland street,		Bituminous macadam,	842	2,807
Rowland avenue,	Plainfield street to Fisk avenue,	Bituminous macadam,	658	1,674
Rupert street,		Bituminous macadam,	349	1,163
Rutland street,		Tar top,	277	926
Rutledge avenue,		Water-bound macadam,	516	1,599
Salem street,	(See Mattoon street)			
Saratoga street,	Main to Dwight street extension,	Sheet asphalt,	372	1,144
Saratoga street,	Dwight street extension to Richelieu street,	Bituminous macadam,	432	1,493
Sargeant street,		Sheet asphalt,	857	2,878
School street,		Bituminous concrete,	1,422	4,799
Scott street,		Bituminous macadam,	673	2,355
Seventh street,		Sheet asphalt,	821	2,573
Sharon street,	Main to North,	Bituminous concrete,	917	2,855
Sharon street,	North to foot of hill,	Bituminous concrete,	334	1,253
‡Sharon street,	Foot of hill to Chestnut street,	Bituminous macadam,	213	664
Shattuck street,		Bituminous macadam,	1,121	3,707
Shefford street,	Springfield to Springfield, and Caseland,	Bituminous macadam,	1,594	5,313
Sheldon street,		Tar top,	643	2,016
Sherman street,		Bituminous macadam,	1,528	5,508
Silver street,		Bituminous macadam,	868	2,894
Sorrento street,		Bituminous macadam,	799	2,685

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Springfield street,	Chestnut street to Atwater terrace and Hamburg street to Chicopee line,	Water-bound macadam,	——	*1,242
Springfield street,	Chestnut to Atwater Glen,	Tar top,	820	3,437
Springfield street,	Atwater Glen to top of hill,	Tar top,	1,042	5,726
Springfield street,	Russell's south line, to Shefford street,	Bituminous macadam,	369	1,972
Springfield street,	Shefford to Armory,	Bituminous concrete,	1,037	4,800
Springfield street,	Armory street intersection,	Bituminous macadam,	225	780
Springfield street,	Armory street to Chicopee line,	Water-bound macadam,	1,027	2,738
Spruce street,		Water-bound macadam,	699	1,737
Spruceland avenue,		Water-bound macadam,	1,370	4,566
‡Stafford street,		Bituminous macadam,	2,740	9,133
Stearns square,	West of Park,	Sheet asphalt,	} 257	1,141
Stearns square,	East of Park,	Sheet asphalt,		
Stebbins street,		Water-bound macadam,	973	3,243
Stevens street,		Bituminous macadam,	1,196	4,020
St. James avenue,	State street to 175′ west of Dartmouth street, and 175′ east of Princeton to N. Y., N. H. & H. R. R.,	Tar top,	3,146	15,348
St. James boulevard,	22′ wide in center of street,	Bituminous macadam,	2,370	7,409
Stockbridge street,	Willow to foot of hill,	Water-bound macadam,	318	499
Stratford terrace,		Bituminous macadam,	532	2,315
‡Suffolk street,	Wilbraham road to Marlborough street,	Bituminous macadam,	789	2,455
Summer street,	Spring street to 85′ west of Federal,	Granite blocks on sand,	2,613	8,176
‡Summit street,		Bituminous macadam,	466	1,558
Sumner avenue,	Longhill to Sumner terrace, north side,	Sheet asphalt,	3,222	7,945
Sumner avenue,	Longhill to Fort Pleasant avenue, car tracks,	Bituminous macadam,	——	1,288
Sumner avenue,	Longhill to Beechwood and Forest Park avenue to Oakland street, south side,	Water-bound macadam,	——	3,734

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
***Sumner avenue,	90′ east of Beechwood to 120′ west of Oakland street, south track and dummy,	Sheet asphalt,	——	2,736
Sumner avenue,	Fort Pleasant avenue to Oakland street, north track,	Bituminous macadam,	——	1,479
‡Sumner avenue,	Sumner terrace to Lenox street, north side,	Bituminous macadam,	1,700	4,236
Sumner avenue,	Lenox street to 90′ west of Ventura,	Bituminous concrete,	484	5,626
‡Sumner avenue,	90′ west of Ventura to White street,	Bituminous macadam,	2,090	13,460
Sumner avenue,	White to Daviston,	Bituminous macadam,	858	5,992
Sumner avenue,	Daviston to Allen street,	Water-bound macadam,	3,941	11,590
Sumner terrace,		Bituminous macadam,	427	2,268
Talcott avenue,		Bituminous macadam,	721	3,134
Taylor street,	Main to Dwight,	Bituminous concrete,	552	1,857
Temple street,		Sheet asphalt,	950	3,163
Tenth street,	Main to North,	Bituminous concrete,	908	2,574
Tenth street,	North street to foot of hill,	Bituminous concrete,	397	1,123
‡Tenth street,	Foot of hill to Chestnut,	Bituminous macadam,	220	625
Terrence street,		Water-bound macadam,	714	2,380
Thomas street,		Bituminous macadam,	583	1,945
Thompson street,	State to Bay,	Tar top,	786	2,582
Thompson street,	Bay to St. James avenue,	Tar top,	650	2,183
Thompson street,	Worthington to St. James avenue,	Water-bound macadam,	1,307	4,024
Tracy street,		Bituminous macadam,	425	1,363
‡Trafton road,		Bituminous macadam,	2,035	8,111
‡Trinity terrace,		Bituminous macadam,	488	3,124
Tyler street,	Oak to Hancock,	Water-bound macadam,	1,346	4,002
Tyler street,	Hancock street to Eastern avenue,	Bituminous macadam,	1,343	4,326
Tyler street,	Eastern avenue to Colton street,	Bituminous macadam,	275	892
Union street,	Water street to N. Y., N. H. & H. R. R.,	Water-bound macadam,	414	1,702

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Union street,	Water to Main,	Bituminous concrete,	935	3,049
Union street,	Willow to Dale,	Sheet asphalt,	222	747
Union street,	Dale to foot of hill,	Water-bound macadam,	172	413
Union street,	Maple to School,	Bituminous concrete,	640	1,924
Union street,	School to Mulberry,	Water-bound macadam,	701	3,587
Union street,	Mulberry to Walnut,	Bituminous concrete,	859	3,006
Union street,	Walnut to Oak,	Bituminous concrete,	424	1,122
Union street,	Oak to Eastern avenue,	Bituminous macadam,	2,747	8,740
Union street,	Eastern avenue to Colton street,	Bituminous macadam,	291	894
Vassar street,		Bituminous macadam,	495	1,685
Ventura street,		Bituminous macadam,	804	2,680
Vine street,		Sheet asphalt,	703	1,797
Vinton street,		Water-bound macadam,	612	2,465
Wait street,		Bituminous macadam,	1,428	3,808
Walnut street,	Hickory street to top of hill,	Water-bound macadam,	440	1,961
Walter street,		Bituminous macadam,	396	1,320
Waltham avenue,		Tar top,	985	2,442
Warner street,		Water-bound macadam,	691	2,152
Warriner avenue,		Water-bound macadam,	450	1,601
Warwick street,	Heywood street, easterly,	Water-bound macadam,	811	2,703
Washburn street,		Water-bound macadam,	1,400	4,667
Washington road,	Maplewood terrace to Pineywoods avenue,	Water-bound macadam,	1,083	3,610
Washington road,	Pineywoods avenue to Washington boulevard,	Bituminous macadam,	508	1,693
Washington street,	Dickinson street to Commonwealth avenue,	Bituminous macadam,	523	1,847
‡Washington street,	Commonwealth avenue to Woodlawn street,	Bituminous macadam,	962	3,241
Wason avenue,	Main street to B. & M. R. R.,	Sheet asphalt,	523	2,208
Wason avenue,	B. & M. R. R. to Plainfield street,	Bituminous macadam,	1,321	4,370
Water street,	Hampden to Bridge,	Granite blocks on sand,	586	3,906

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TABLE OF SURFACE PAVEMENT.—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.
Water street,	Bridge to Elm,	Bituminous macadam,	——	6,389
Water street,	Bridge to William,	Tar top,	2,974	9,089
Water street,	William street to Whitney place,	Bituminous concrete,	530	3,761
Water street,	Whitney place to Gardner street,	Bituminous macadam,	725	4,054
Waverly street,		Water-bound macadam,	850	2,910
Webster street,		Water-bound macadam,	606	2,020
Wellesley street,		Water-bound macadam,	444	1,480
Wellington street,	Wilbraham road to Marlborough street,	Bituminous macadam,	825	2,750
Wendell place,		Sheet asphalt,	469	1,458
West street,	Hampden park to North End bridge,	Bituminous concrete,	1,073	4,260
Westernview street,		Water-bound macadam,	650	2,167
Westford avenue,	Wilbraham road to Gunn square,	Water-bound macadam,	1,380	6,133
Westminster street,		Tar top,	1,875	6,429
White street,	Allen street to St. Railway turn-out and Orange street to Sumner avenue,	Tar top,	3,459	12,057
White street,	East and west sides of St. Railway turn-out,	Bituminous concrete,	956	1,763
White street,	Sumner avenue to Belmont avenue, 15′ wide,	Tar top,	2,100	4,200
White street,	Belmont avenue to Longmeadow line,	Bituminous concrete,	1,460	7,787
Whitney place,		Bituminous macadam,	455	1,202
Whittier avenue,		Bituminous macadam,	1,212	4,372
Wight place,		Water-bound macadam,	388	692
‡Wigwam place,		Bituminous macadam,	292	1,011
Wilbraham avenue,	Wilbraham road to King street,	Tar top,	2,086	6,994
Wilbraham avenue,	King to Alden,	Bituminous macadam,	1,182	3,940
Wilbraham road,	N. Y., N. H. & H. R. R. to Massachusetts ave.,	Bituminous concrete,	1,230	5,830
Wilbraham road,	Massachusetts avenue to Homer street,	Bituminous macadam,	610	2,554
Wilbraham road,	Homer to Benton street, north side,	Bituminous macadam,	2,604	5,293
Wilbraham road,	Homer to Benton street, south side,	Tar top,	——	6,478

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TABLE OF SURFACE PAVEMENT.—CONCLUDED.

Name.	Limits.	Material.	Length in feet	Area in sq. yds.
Wilcox street,	Water street, westerly,	Tar top,	390	1,029
Wilcox street,	Water to Main,	Bituminous concrete,	928	3,062
Willard avenue,		Bituminous macadam,	766	2,328
William street,	Water street to N. Y., N. H. & H. R. R.,	Water-bound macadam,	466	1,381
William street,	Water to Main,	Bituminous concrete,	902	2,978
Winchester street,		Bituminous macadam,	378	1,252
Windsor street,		Bituminous macadam,	679	2,241
Winter street,		Tar top,	355	1,105
Winthrop street,		Water-bound macadam,	659	2,397
Wolcott street,		Bituminous macadam,	439	1,463
Woodside terrace,		Water-bound macadam,	937	3,123
‡Woodlawn street,	Belmont avenue to Blake street,	Bituminous macadam,	1,694	6,038
Worcester avenue,		Bituminous macadam,	811	2,709
Worcester street, I. O.,	Pine street to Fiberloid Co.'s driveway, 18′ wide,	Water-bound macadam,	4,994	10,988
Worthington street,	Broadway to Main street,	Bituminous concrete,	404	1,418
Worthington street,	Spring street to Kibbe avenue,	Bituminous concrete,	1,513	5,059
Worthington street,	Kibbe avenue to Federal street,	Water-bound macadam,	812	2,814
‡Worthington street,	Armory to Bowdoin,	Bituminous macadam,	884	1,542
Worthington street,	Bowdoin to St. James avenue,	Bituminous concrete,	747	2,590
Yale street,		Water-bound macadam,	1,493	5,142
York street,	Main street to Pecousic avenue,	Bituminous concrete,	407	1,085
York street,	Pecousic avenue to N. Y., N. H. & H. R. R.,	Sheet asphalt,	491	1,482

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TABLE OF SURFACE PAVEMENT.

RECAPITULATION.

	Miles.	Square yards.
Water-bound macadam,.....	29.452	541,222
Bituminous macadam,.....	47.121	891,706
Bituminous concrete,.....	13.330	255,735
Tar top,.....	12.047	238,918
Granite on sand,.....	1.797	33,465
Sheet asphalt,.....	5.320	95,324
Glutrin-bound macadam,.....	.040	552
Grit asphalt,.....	.368	6,330
Rocmac,.....	.161	2,472
	109.636	2,065,724
Gravel roads,.....	44.32	
Dirt roads,.....	7.95	

*Includes macadam laid by Springfield Street Railway Company.
**Macadam laid by Springfield Street Railway Company.
***Laid for Springfield Street Railway Company.
†Macadam laid by private parties.
‡Asphalt penetration.

SUMMARY OF STREETS.

Permanent pavement,.....	25.65 miles
Surface pavement,.....	109.636 miles
Gravel roads,.....	44.32 miles
Dirt roads,.....	7.95 miles
	187.556 miles

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STREET MAINTENANCE.

RESURFACING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
*Abbe avenue,..	Approaches to bridge,.....	Bituminous macadam,...	831	1,912	$25.83	$199.62	$1,863.15	$0.97
*Albany street,..	Land of Hampden Paint Co. to Glen road,.....	Bituminous macadam,...	1,400	4,334	79.76	832.07	7,766.02	1.79
Alfred street,...	North Main to Birnie avenue,.....	Bituminous macadam,...	485	1,617	6.19	105.09	980.83	.61
Boylston street,.	Emery to Clinton,..	Sheet asphalt,.	299	731	11.12	141.56	1,321.17	1.81
Carew street,...	St. James avenue to asphalt penetration,.....	Gravel,.....	979	2,177	16.86	197.96	1,847.62	.85
*Congress street,	Foot of hill to Chestnut,.....	Bituminous macadam,...	241	616	12.63	89.60	836.28	1.36
Donald street,..	North Main to Birnie avenue,.....	Bituminous macadam,...	441	1,468	6.39	54.59	509.54	.35
Douglas street,..	North Main to Birnie avenue,.....	Bituminous macadam,...	532	1,775	9.69	105.77	987.20	.56
*Elm street,....	Water to railroad tracks,.....	Bituminous macadam,...	179	387	5.58	44.09	411.54	1.06
Elmwood street,.	Main to Hanover,..	Sheet asphalt,.	806	2,509	49.33	552.16	5,153.45	2.05

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STREET MAINTENANCE.

RESURFACING—*Continued.*

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
*Essex street,...	Foot of hill to Chestnut,.....	Bituminous macadam,...	205	661	$5.01	$61.47	$573.72	$0.87
*Firglade avenue	Sumner avenue to Pineywoods avenue,.....	Bituminous macadam,...	1,000	3,413	28.65	277.71	2,591.92	.76
*Fisk avenue,...	Rowland to Wason,	Bituminous macadam,...	1,682	7,532	112.17	887.30	8,281.50	1.10
*Grace street,...	North Main to Birnie avenue,.....	Bituminous macadam,...	347	1,157	19.86	123.97	1,157.08	1.00
Greenwich street	North Main to Birnie avenue,.....	Bituminous macadam,...	630	1,974	6.45	111.79	1,043.37	.53
*Greenwood street,.....	Foot of hill to Chestnut,.....	Bituminous macadam,...	187	623	15.39	93.83	875.76	1.41
Holyoke street,..	Main to Fulton,...	Sheet asphalt,.	739	1,888	26.86	360.95	3,368.94	1.78
*Lincoln street,..	Magazine to Bowdoin,.....	Bituminous macadam,...	374	1,462	14.47	146.66	1,368.82	.94
Medford street,	North Main to Birnie avenue,.....	Bituminous macadam,...	624	1,941	13.87	134.04	1,251.04	.64

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STREET MAINTENANCE.

RESURFACING—*Continued.*

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
*Mill street,	Main to Locust,	Bituminous macadam,	539	2,547	$29.07	$282.30	$2,634.83	$1.03
Myrtle street,	State to High,	Sheet asphalt,	491	1,114	19.17	237.66	2,218.17	1.99
Norwood street,	Main to Hanover,	Sheet asphalt,	925	2,674	55.56	614.25	5,733.07	2.14
*Oak street, I.O.,	Worcester to Berkshire avenue,	Bituminous macadam,	697	3,323	55.57	431.08	4,023.42	1.21
*Patton street,	Foot of hill to Chestnut,	Bituminous macadam,	217	725	6.24	64.29	600.01	.83
Portland street,	North Main to Birnie avenue,	Bituminous macadam,	613	2,042	17.34	152.02	1,418.86	.69
Princeton street,	Bay to St. James avenue,	Sheet asphalt,	1,500	6,794	124.53	1,451.01	13,542.81	1.99
Rowland avenue,	Plainfield street to Fisk avenue,	Bituminous macadam,	658	1,674	8.48	76.53	714.32	.43
Sargeant street,	North Main to Fulton,	Sheet asphalt,	857	2,878	33.48	547.28	5,108.01	1.77
Seventh street,	Main to Fulton,	Sheet asphalt,	821	2,573	35.55	472.28	4,407.94	1.71
Sumner avenue,	North side Sumner terrace to Long Hill,	Sheet asphalt,	3,222	7,945	154.54	1,753.44	16,365.42	2.06

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STREET MAINTENANCE.

RESURFACING—*Concluded.*

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Depreciation.	Indirect Cost.	Total Cost.	Cost per sq. yd.
*Tenth street,...	Foot of hill to Chestnut,.....	Bituminous macadam,...	220	625	$5.01	$49.73	$464.17	$0.74
Thomas street,..	North Main to Birnie avenue,.....	Bituminous macadam,...	584	1,945	10.77	121.12	1,130.44	.58
Union street,....	Oak to Eastern avenue,.....	Bituminous macadam,...	2,747	8,740	53.31	598.79	5,588.70	.64
Walter street,...	North Main to Birnie avenue,.....	Bituminous macadam,...	396	1,320	2.76	35.48	331.15	.25
Worthington street,.....	Dwight to Chestnut	Sheet asphalt,.	410	1,509	45.81	600.42	5,603.93	3.71
York street,....	Pecousic avenue to railroad tracks,...	Sheet asphalt,.	491	1,482	22.91	311.53	2,907.62	1.96
Totals,.....	.....	.....	27,369	88,087	$1,146.21	$12,319.44	$114,981.82	....

*Denotes asphalt penetration.

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STREET MAINTENANCE.

RESURFACING RECAPITULATION.

	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost.
Tar macadam,.....	7,710	24,496	$0.57	$13,955.45
Asphalt macadam,....	8,119	29,317	1.14	33,448.22
Sheet asphalt,.....	10,561	32,097	2.05	65,730.53
Gravel,.....	979	2,177	.85	1,847.62
Totals,.....	27,369	88,087	.....	$114,981.82

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STREET MAINTENANCE.

REPAIRS.

Street.	Gravel.	Surface Paving.	Permanent Paving.	Street Signs.	Fences.	Miscellaneous.	Total.
Adams street,	.....	$77.27	.....	.....	.....	.....	$77.27
Alden street,	.....	217.11	.....	.....	.....	.....	217.11
Allen street,	$3,934.63	.....	.....	.....	$4.07	.....	3,938.70
Andrew street,	.....	103.15	.....	.....	.....	.....	103.15
Armory street,	.....	28.03	$33.35	.....	.....	.....	61.38
Ashley street,	.....	41.87	.....	.....	.....	.....	41.87
Auburn street,	.....	22.05	.....	.....	.....	.....	22.05
Bay road,	1,055.44	.....	.....	.....	.....	.....	1,055.44
Bay street,	.....	98.32	53.24	.....	.....	.....	151.56
Belmont avenue,	.....	939.45	1,845.39	.....	.....	.....	2,784.84
Benton street,	.....	186.24	.....	.....	.....	.....	186.24
Berkshire avenue,	325.73	.....	56.76	.....	21.10	.....	403.59
Berkshire avenue, I. O.,	1,471.21	136.14	.....	.....	.....	.....	1,607.35
Berkshire street, I. O.,	.....	26.95	.....	.....	.....	.....	26.95
Biltmore street,	50.80	.....	.....	.....	.....	.....	50.80
Birnie avenue,	.....	224.41	.....	.....	.....	.....	224.41
Bliss street,	.....	.....	52.95	.....	.....	.....	52.95
Boston road,	248.66	.....	296.35	.....	.....	.....	545.01
Boylston street,	.....	17.17	.....	.....	.....	.....	17.17
Bridge street,	.....	158.93	21.37	.....	.....	.....	180.30
Bristol street,	.....	57.15	.....	.....	.....	.....	57.15
Broadway,	.....	48.74	.....	.....	.....	.....	48.74
Burr street,	.....	105.75	.....	.....	.....	.....	105.75
Butler street,	.....	297.99	.....	.....	.....	.....	297.99
Cambridge street,	.....	246.80	.....	.....	.....	.....	246.80
Carew street,	.....	1,919.81	.....	.....	.....	.....	1,919.81

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STREET MAINTENANCE.

REPAIRS.—*Continued.*

Street.	Gravel.	Surface Paving.	Permanent Paving.	Street Signs.	Fences.	Miscellaneous.	Total.
Cass street,	.....	$78.92	.....	.....	.....	.....	$78.92
Central street,	.....	1,268.74	.....	.....	.....	.....	1,268.74
Charles street,	.....	82.14	.....	.....	.....	.....	82.14
Charter avenue,	.....	.....	$34.36	.....	.....	.....	34.36
Chestnut street,	.....	587.73	83.07	.....	.....	.....	670.80
Colton street,	.....	29.37	.....	.....	.....	.....	29.37
Congress street,	.....	100.77	.....	.....	.....	.....	100.77
Cottage street,	$149.02	.....	.....	.....	.....	.....	149.02
Court street,	.....	.....	26.68	.....	.....	.....	26.68
Cypress street,	.....	.....	210.91	.....	.....	.....	210.91
Dale street,	.....	11.83	.....	.....	.....	.....	11.83
Dawes street,	.....	244.15	.....	.....	.....	.....	244.15
Dickinson street,	.....	1,485.26	.....	.....	.....	.....	1,485.26
Dunmoreland street,	.....	100.48	.....	.....	.....	.....	100.48
Dwight street,	.....	.....	28.70	.....	.....	.....	28.70
East Alvord street,	29.05	.....	.....	.....	.....	.....	29.05
Eastern avenue,	.....	59.66	.....	.....	.....	.....	59.66
Elliot street,	.....	97.24	.....	.....	.....	.....	97.24
Elm street,	.....	.....	30.73	.....	.....	.....	30.73
Eloise street,	.....	.....	.....	.....	.....	$42.17	42.17
Federal street,	.....	180.11	.....	.....	.....	.....	180.11
Ferry street,	.....	.....	196.88	.....	.....	.....	196.88
Forest avenue,	2,901.77	.....	.....	.....	.....	.....	2,901.77
Fort street,	.....	155.80	.....	.....	.....	.....	155.80
Franklin street,	.....	100.36	.....	.....	.....	.....	100.36
Fremont street,	.....	11.09	.....	.....	.....	.....	11.09

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STREET MAINTENANCE.

REPAIRS.—*Continued.*

Street.	Gravel.	Surface Paving.	Permanent Paving.	Street Signs.	Fences.	Miscellaneous.	Total.
Gardner street,	.....	$32.59	.....	.....	.....	.....	$32.59
Garfield street,	.....	79.39	.....	.....	.....	.....	79.39
Gray's avenue,	.....	69.69	.....	.....	.....	.....	69.69
Greenwood street,	.....	25.94	.....	.....	.....	.....	25.94
Hampton street,	.....	51.23	.....	.....	.....	.....	51.23
Harrison avenue,	.....	.....	$48.20	.....	.....	.....	48.20
Hickory street,	$469.72	.....	.....	.....	.....	.....	469.72
Hillman street,	.....	28.47	.....	.....	.....	.....	28.47
King street,	.....	68.84	.....	.....	.....	.....	68.84
Liberty street,	1,403.99	282.99	1,265.77	.....	.....	.....	2,952.75
Locust street,	.....	.....	334.14	.....	.....	.....	334.14
Longhill street,	.....	259.53	.....	.....	.....	.....	259.53
Lyman street,	.....	66.03	.....	.....	.....	.....	66.03
Magazine street,	.....	.....	106.10	.....	.....	.....	106.10
Main street,	.....	149.69	6,856.45	.....	.....	.....	7,006.14
Main street, I. O.,	62.48	94.95	.....	.....	$22.74	.....	180.17
Maple street,	.....	122.39	.....	.....	.....	.....	122.39
Marengo Park,	.....	13.28	.....	.....	.....	.....	13.28
Margaret street,	.....	54.78	.....	.....	.....	.....	54.78
Market street,	.....	273.57	.....	.....	.....	.....	273.57
Marshall street,	.....	33.47	.....	.....	.....	.....	33.47
Mason street,	.....	30.36	.....	.....	.....	.....	30.36
Massachusetts avenue,	.....	114.45	.....	.....	.....	.....	114.45
Mattoon street,	.....	16.80	.....	.....	.....	.....	16.80
Melrose street,	113.66	.....	.....	.....	.....	.....	113.66
Mill street,	.....	34.22	.....	.....	.....	.....	34.22

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STREET MAINTENANCE.

REPAIRS.—*Continued.*

Street.	Gravel.	Surface Paving.	Permanent Paving.	Street Signs.	Fences.	Miscellaneous.	Total.
Montmorenci street,	.....	$254.95	.....	.....	.....	.....	$254.95
Mulberry street,	.....	2.83	.....	.....	.....	.....	2.83
North street,	.....	314.88	$124.07	.....	.....	.....	438.95
Northampton avenue,	.....	223.87	.....	.....	.....	.....	223.87
North Main street,	.....	.....	693.10	.....	.....	.....	693.10
Norwood street,	.....	11.40	.....	.....	.....	.....	11.40
Oak street,	.....	292.73	.....	.....	.....	.....	292.73
Oak street, I. O.,	$281.11	243.84	.....	.....	.....	.....	524.95
Oak Grove avenue,	.....	160.64	.....	.....	.....	.....	160.64
Oakland street,	.....	56.17	.....	.....	.....	.....	56.17
Old Bay road,	48.73	.....	.....	.....	.....	.....	48.73
Page boulevard,	277.65	1,593.98	.....	.....	.....	$81.10	1,952.73
Parker street,	925.96	.....	.....	.....	.....	.....	925.96
Parker street, I. O.,	3,520.69	.....	.....	.....	.....	.....	3,520.69
Pasco road, I. O.,	626.50	927.54	.....	.....	.....	.....	1,554.04
Patton street,	.....	25.95	.....	.....	.....	.....	25.95
Pearl street,	.....	223.34	.....	.....	.....	.....	223.34
Pecousic avenue,	.....	1,705.83	.....	.....	.....	.....	1,705.83
Pine street,	.....	88.52	.....	.....	.....	.....	88.52
Plainfield street,	.....	.....	1,059.49	.....	.....	.....	1,059.49
Plumtree road,	1,092.79	.....	.....	.....	.....	.....	1,092.79
Princeton street,	.....	7.49	.....	.....	.....	.....	7.49
Pynchon street,	.....	.....	70.23	.....	.....	.....	70.23
Rittenhouse terrace,	132.32	.....	.....	.....	.....	.....	132.32
Robbins road,	.....	143.92	.....	.....	.....	.....	143.92
Rochelle street,	.....	155.56	.....	.....	.....	.....	155.56

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STREET MAINTENANCE.

REPAIRS.—*Continued.*

Street.	Gravel.	Surface Paving.	Permanent Paving.	Street Signs.	Fences.	Miscellaneous.	Total.
Sargeant street,	.....	$32.69	.....	.....	.....	.....	$32.69
School street,	.....	17.60	.....	.....	.....	.....	17.60
Sharon street,	.....	124.83	.....	.....	.....	.....	124.83
Shefford street,	.....	160.61	.....	.....	.....	.....	160.61
Sixteen Acre road,	$1,450.84	.....	.....	.....	.....	.....	1,450.84
Spring street,	.....	.....	$353.79	.....	.....	.....	353.79
Springfield street,	.....	325.88	.....	.....	.....	.....	325.88
State street,	.....	.....	1,442.88	.....	.....	.....	1,442.88
Stevens street,	.....	369.81	.....	.....	.....	.....	369.81
St. James avenue,	.....	407.12	1,037.16	.....	.....	.....	1,444.28
Stockbridge street,	.....	.....	7.50	.....	.....	.....	7.50
Stony Hill road,	505.40	.....	.....	.....	.....	.....	505.40
Summer street,	.....	.....	269.50	.....	.....	.....	269.50
Sumner avenue,	144.64	8,334.73	.....	.....	.....	.....	8,479.37
Sundry streets,	5,330.46	41,903.78	.....	$4,598.38	$4,704.06	$3,631.59	60,168.27
Taylor street,	.....	193.77	.....	.....	.....	.....	193.77
Temple street,	.....	54.02	.....	.....	.....	.....	54.02
Tenth street,	.....	18.28	.....	.....	.....	.....	18.28
Tinkham road,	631.34	.....	.....	.....	.....	.....	631.34
Townsley avenue,	.....	.....	90.52	.....	.....	.....	90.52
Union street,	.....	205.73	.....	.....	.....	.....	205.73
Vernon street,	.....	.....	111.01	.....	.....	.....	111.01
Virginia street,	89.56	.....	.....	.....	.....	.....	89.56
Walnut street,	.....	.....	1,046.23	.....	.....	.....	1,046.23
Wason avenue,	.....	27.87	.....	.....	.....	.....	27.87
Water street,	.....	12.64	.....	.....	.....	.....	12.64

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STREET MAINTENANCE.

REPAIRS.—*Concluded.*

Street.	Gravel.	Surface Paving.	Permanent Paving.	Street Signs.	Fences.	Miscellaneous.	Total.
Wendell place,	.....	$11.47	.....	.....	.....	.....	$11.47
West Alvord street,	$21.16	.....	.....	.....	.....	.....	21.16
Westford avenue,	36.42	209.91	.....	.....	.....	.....	246.33
White street,	.....	1,865.45	$52.56	.....	.....	.....	1,918.01
Wilbraham avenue,	.....	154.53	.....	.....	.....	.....	154.53
Wilbraham road,	4,073.57	509.43	.....	.....	$19.38	.....	4,602.38
Wilcox street,	.....	156.76	.....	.....	.....	.....	156.76
William street,	.....	338.40	28.91	.....	.....	.....	367.31
Worcester street, I. O.,	1,755.70	257.26	.....	.....	160.64	.....	2,173.70
Worthington street,	.....	375.15	479.16	.....	.....	.....	854.31
Totals,	$33,161.00	$73,950.80	$18,447.51	$4,598.38	$4,932.09	$3,754.86	$138,844.64

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GENERAL REPAIRS.

ASSESSABLE COST.

Street.	Surface Paving.	Permanent Paving.	Total Cost.
Abbe avenue,	$7.10	....	$7.10
Acushnet avenue,	3.16	....	3.16
Adams street,	5.71	....	5.71
Albemarle street,	6.17	....	6.17
Alderman street,	8.82	....	8.82
Allen street,	19.26	....	19.26
Amaron street,	5.50	....	5.50
Amherst street,	6.85	....	6.85
Andrew street,	12.76	....	12.76
Arch street,	7.11	....	7.11
Armory street,	384.68	....	384.68
Bancroft street,	14.26	....	14.26
Bartlett street,	3.18	....	3.18
Beaumont street,	5.71	....	5.71
Beech street,	5.43	....	5.43
Beechwood street,	5.72	....	5.72
Belmont avenue,	5,627.53	$21.78	5,649.31
Benton street,	16.83	....	16.83
Berkshire avenue, I. O.,	714.01	....	714.01
Berkshire street, I. O.,	66.12	....	66.12
Birnie avenue,	7.10	....	7.10
Bloomfield street,	21.05	....	21.05
Bond street,	11.99	....	11.99
Bowdoin street,	3.66	....	3.66
Bowles street,	166.36	....	166.36
Bradford street,	3.08	....	3.08
Bridge street,	13.29	....	13.29
Bristol street,	5.47	....	5.47
Broad street,	5.72	....	5.72
Brookline avenue,	44.98	....	44.98
Brown street,	4.04	....	4.04
Buckingham street,	2.98	....	2.98
Calhoun street,	11.08	....	11.08
Carew street,	954.36	....	954.36
Catharine street,	....	38.98	38.98
Cedar street,	11.77	....	11.77
Center street,	15.87	....	15.87
Central street,	167.34	....	167.34
Charles street,	7.71	....	7.71
Cherryvale avenue,	32.77	....	32.77
Chestnut street,	48.70	47.40	96.10
Church street,	23.35	....	23.35
Churchill street,	8.09	....	8.09
Clantoy street,	23.60	....	23.60
Clarendon street,	12.14	....	12.14
Collins street,	93.47	....	93.47
Colton street,	3.08	....	3.08
Commonwealth avenue,	8.72	....	8.72

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GENERAL REPAIRS.

ASSESSABLE COST.—*Continued.*

Street.	Surface Paving.	Permanent Paving.	Total Cost.
Cortland street,	$7.49	....	$7.49
Court street,	....	$76.05	76.05
Crane street,	9.72	....	9.72
Crystal avenue,	71.88	....	71.88
Cumberland street,	12.71	....	12.71
Cypress street,	....	8.14	8.14
Dartmouth terrace,	4.77	....	4.77
Demond avenue,	5.54	....	5.54
Dexter street,	5.43	....	5.43
Dickinson street,	39.95	....	39.95
Dorchester street,	5.96	....	5.96
Dwight street,	....	338.72	338.72
Eastern avenue,	173.73	....	173.73
East Hooker street,	16.60	....	16.60
Elm street,	....	123.26	123.26
Eloise street,	91.72	....	91.72
Emery street,	....	15.39	15.39
Essex street,	10.25	....	10.25
Euclid avenue,	11.25	....	11.25
Everett street,	29.07	....	29.07
Farnsworth street,	29.25	....	29.25
Firglade avenue,	59.08	....	59.08
Fisk avenue,	5.75	....	5.75
Florentine Gardens,	5.72	....	5.72
Forest street,	6.33	....	6.33
Forest Park avenue,	5.61	....	5.61
Fort street,	7.58	....	7.58
Fort Pleasant avenue,	378.66	....	378.66
Foster street,	3.15	....	3.15
Frost street,	111.38	....	111.38
Fulton street,	....	45.97	45.97
Governor street,	6.15	....	6.15
Greene street,	5.95	....	5.95
Greenleaf street,	4.68	....	4.68
Greenwich street,	13.06	....	13.06
Grenada terrace,	4.56	....	4.56
Grosvenor street,	8.71	....	8.71
Grover street,	8.60	....	8.60
Hall street,	5.71	....	5.71
Hancock street,	37.18	....	37.18
Harvard street,	51.99	....	51.99
Hawley street,	8.52	....	8.52
Hebron street,	6.46	....	6.46
Herman street,	5.53	....	5.53
Hickory street,	....	21.10	21.10
High street,	28.54	....	28.54
Hollywood street,	4.44	....	4.44
Home street,	2.98	....	2.98

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GENERAL REPAIRS.

ASSESSABLE COST.—*Continued.*

Street.	Surface Paving.	Permanent Paving.	Total Cost.
Homer street,	$8.51	....	$8.51
Huntington street,	18.64	....	18.64
Hyde avenue,	14.22	....	14.22
Ionia street,	5.15	....	5.15
Itendale street,	28.69	....	28.69
Jasper street,	15.81	....	15.81
Jefferson avenue,	15.17	....	15.17
John street,	6.43	....	6.43
Keith street,	186.41	....	186.41
Kenwood Park,	5.72	....	5.72
Kibbe avenue,	7.18	....	7.18
Kimberly avenue,	8.51	....	8.51
King street,	43.50	....	43.50
Ladd street,	45.64	....	45.64
Lafayette street,	14.12	....	14.12
Lebanon street,	4.09	....	4.09
Leete street,	3.15	....	3.15
Lexington avenue,	7.10	....	7.10
Liberty street,	46.48	$139.38	185.86
Linden street,	3.08	....	3.08
Locust street,	....	1,067.26	1,067.26
Logan street,	9.04	....	9.04
Longhill street,	7.66	....	7.66
Lyman street,	....	18.64	18.64
Main street,	....	4,302.91	4,302.91
Main street, I. O.,	1,114.16	127.10	1,241.26
Malden street,	36.19	....	36.19
Mapledell street,	8.51	....	8.51
Marble street,	22.86	....	22.86
Marengo Park,	11.25	....	11.25
Marion street,	30.82	....	30.82
Market street,	7.28	....	7.28
Massasoit street,	14.27	....	14.27
Maynard street,	8.52	....	8.52
McKnight street,	5.51	....	5.51
Merwin street,	11.70	....	11.70
Middlesex street,	5.50	....	5.50
Monmouth street,	10.89	....	10.89
Monroe street,	45.97	....	45.97
Montmorenci street,	12.63	....	12.63
Montrose street,	3.24	....	3.24
Moreland street,	11.99	....	11.99
Morris street,	5.72	....	5.72
Mulberry street,	48.76	....	48.76
Murray Hill avenue,	15.41	....	15.41
Myrtle street,	34.93	....	34.93
Narragansett street,	14.21	....	14.21
New street,	....	12.49	12.49

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GENERAL REPAIRS.

ASSESSABLE COST.—*Continued.*

Street.	Surface Paving.	Permanent Paving.	Total Cost.
Noble street,	$14.38	....	$14.38
North street,	48.03	....	48.03
North Main street,	....	$410.40	410.40
Oak street,	10.40	....	10.40
Oak Grove avenue,	11.57	....	11.57
Orange street,	20.08	....	20.08
Orchard street,	3.08	....	3.08
Orleans street,	13.28	....	13.28
Osgood street,	3.08	....	3.08
Page boulevard,	4,242.57	....	4,242.57
Palmer avenue,	19.95	....	19.95
Parkwood street,	17.14	....	17.14
Pasco road,	117.90	....	117.90
Pearl street,	....	5.49	5.49
Pease street,	2.98	....	2.98
Pecousic avenue,	4.01	....	4.01
Pendleton avenue,	19.73	....	19.73
Phoenix terrace,	16.44	....	16.44
Plainfield street,	4.12	432.39	436.51
Pleasant street,	3.10	....	3.10
Plymouth street,	11.08	....	11.08
Portland street,	8.07	....	8.07
Prince street,	11.04	....	11.04
Princeton street,	20.00	....	20.00
Prospect street,	22.28	....	22.28
Queen street,	28.99	....	28.99
Quincy street,	2.98	....	2.98
Reed street,	30.30	....	30.30
Revere street,	11.44	....	11.44
Ringgold street,	6.46	....	6.46
Rutledge avenue,	37.42	....	37.42
Seventh street,	3.19	....	3.19
Sheldon street,	35.92	....	35.92
Sherman street,	20.28	....	20.28
Sorrento street,	5.71	....	5.71
Spring street,	....	72.07	72.07
Springfield street,	10.37	....	10.37
State street,	.....	4,751.80	4,751.80
Stebbins street,	8.51	....	8.51
St. James avenue,	48.04	39.89	87.93
Summer street,	....	47.32	47.32
Sumner avenue,	480.47	....	480.47
Taylor street,	....	9.96	9.96
Terrence street,	123.47	....	123.47
Thompson street,	6.06	....	6.06
Tracy street,	3.09	....	3.09
Trafton road,	6.79	....	6.79
Tyler street,	6.42	....	6.42

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GENERAL REPAIRS.

ASSESSABLE COST.—*Concluded.*

Street.	Surface Paving.	Permanent Paving.	Total Cost.
Union street,	$23.58	....	$23.58
Vassar street,	2.87	....	2.87
Ventura street,	15.97	....	15.97
Vinton street,	5.54	....	5.54
Wait street,	25.85	....	25.85
Walnut street,	61.99	$191.94	253.93
Warriner avenue,	60.62	....	60.62
Washington road,	4.57	....	4.57
Washington street,	27.34	....	27.34
Water street,	11.24	3,175.77	3,187.01
Waverly street,	11.81	....	11.81
Wellington street,	22.53	....	22.53
Westford avenue,	8.52	....	8.52
Westminster street,	5.79	....	5.79
White street,	105.93	63.30	169.23
Whittier avenue,	3.07	....	3.07
Wilbraham avenue,	23.63	....	23.63
Wilbraham road,	9.06	....	9.06
Wilcox street,	4.91	....	4.91
Willard avenue,	9.21	....	9.21
Willow street,	....	23.09	23.09
Willow street extension,	23.99	....	23.99
Wolcott street,	25.95	....	25.95
Woodlawn street,	3.34	....	3.34
Worthington street,	....	318.03	318.03
Yale street,	19.92	....	19.92
Totals,	$17,971.39	$15,946.02	$33,917.41

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SIDEWALKS AND CURBING.

CONSTRUCTION AND RECONSTRUCTION.

BY ORDER OF THE CITY COUNCIL.

Streets.	Sidewalks.		Length in feet.	Curbing. Length in feet.			Order Approved.
	Material.	Description.		4"	6"	10"	
Armory street (Napier to Liberty),	.....	.....	.....	967.77	.....	.....	June 16, 1919
Belmont place (Nos. 11-15),	Concrete,	New,	58.00	.....	.....	.....	Feb. 7, 1921
Belvidere street,	.....	.....	.....	1,235.46	.....	.....	May 3, 1920
†Bloomfield street,	Concrete,	New,	1,229.10	.....	.....	.....	Oct. 1, 1917
Boston road (northerly side of Berkshire avenue to easterly line of school property),	Cinders,	New,	1,500.80	.....	.....	.....	Jan. 19, 1920
Broadway extension (Court to Pynchon street),	Concrete,	New,	557.62	.....	465.20	74.70	Aug. 26, 1921
Carew street (Massasoit street easterly premises of E. W. Shattuck),	.....	.....	.....	.....	.....	.....	July 25, 1921
*Commonwealth avenue (Fairview avenue to Fern street),	.....	.....	.....	.....	.....	.....	July 25, 1921
Dover street (Main to North, northerly side) (Main to Chestnut, southerly side),	.....	.....	.....	1,416.77	.....	.....	Oct. 18, 1920
Eastern avenue (Wilbraham road to Hickory street),	Concrete,	New,	646.85	.....	.....	.....	May 14, 1917
Eldridge street (west side Belmont avenue to Washington street),	Concrete,	New,	152.60	.....	.....	.....	June 28, 1920

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SIDEWALKS AND CURBING.

CONSTRUCTION AND RECONSTRUCTION.

BY ORDER OF THE CITY COUNCIL.—*Continued.*

Streets.	Sidewalks.		Length in feet.	Curbing. Length in feet.			Order Approved.
	Material.	Description.		4″	6″	10″	
*Eloise street (Sumner avenue to Paridon street),	.....	.....	.....	.....	.....	.....	Dec. 20, 1920
Herman street (Sumner avenue to Vermont street),	Concrete,	New,	280.20	.....	.....	.....	Aug. 21, 1917
Hollywood street (Commonwealth avenue to Dickinson street),	Concrete,	New,	264.60	.....	.....	.....	Oct. 20, 1919
Holyoke street (Main to Fulton),	.....	.....	.....	937.67	.....	.....	July 25, 1921
Johnson street (northerly side Dickinson to Earl),	Concrete,	New,	350.00	.....	.....	.....	Oct. 1, 1917
†Lester street (Sumner avenue to Vermont),	.....	.....	.....	1,139.00	.....	.....	Dec. 27, 1919
*Liberty street (easterly from Carew and northerly to Chicopee road),	.....	.....	.....	.....	.....	.....	May 10, 1921
Los Angeles avenue,	.....	.....	.....	1,271.44	.....	.....	June 6, 1920
Malden street (Allen to Grand),	Concrete,	New,	668.00	.....	.....	.....	Oct. 1, 1917
*Miller street (Armory to Penacook avenue),	.....	.....	.....	.....	.....	.....	June 20, 1921
North street extension (Cumberland street extending northerly to Dover),	.....	.....	.....	417.20	.....	.....	Nov. 22, 1920

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SIDEWALKS AND CURBING.

CONSTRUCTION AND RECONSTRUCTION.

BY ORDER OF THE CITY COUNCIL.—*Concluded.*

Streets.	Sidewalks.		Length in feet.	Curbing. Length in feet.			Order Approved.
	Material.	Description.		4″	6″	10″	
Ozark street,	Concrete,	New,	100.00	.....	.....	.....	June 11, 1917
Pasadena street (White to Alderman),	.....	.....	.....	1,890.90	.....	.....	April 18, 1921
Phoenix terrace,	.....	.....	.....	2,553.89	.....	.....	April 18, 1921
Revere street (Orange to White),	.....	.....	.....	.....	.....	.....	June 11, 1917
Suffolk street (Wilbraham road to Marlborough street),	.....	.....	.....	1,394.30	.....	.....	May 10, 1921
*Taylor street extension (Chestnut to Spring),	.....	.....	.....	.....	1,236.10	.....	May 10, 1921
Terrence street,	Concrete,	New,	329.80	.....	.....	.....	Oct. 1, 1917
Union street (Oak to Colton),	Concrete,	New,	647.30	.....	.....	.....	Sept. 17, 1917
Walden street,	Concrete,	New,	577.00	.....	.....	.....	Sept. 14, 1914
†Washington street,	.....	.....	.....	649.19	.....	.....	Oct. 11, 1920
White street (Allen to Sumner avenue),	Concrete,	New,	1,181.00	.....	.....	.....	July 17, 1917
Wigwam place,	.....	.....	.....	565.00	.....	.....	April 18, 1921
†Woodlawn street,	.....	.....	.....	2,635.25	.....	.....	June 28, 1920
Totals,	.....	.....	8,542.87	17,073.84	1,701.30	74.70	

*Work not completed in 1921.

†Continuation of 1920 work.

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REPORT

OF THE

SEWER DIVISION

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1921.

Mr. Robert P. Marsh, Superintendent of Streets and Engineering.

DEAR SIR:—I herewith submit a description of the work done by the Sewer Division, Department of Streets and Engineering, during the year ending November 30, 1921.

GENERAL DESCRIPTION.

The total expenditures for new sewer construction and reconstruction during the year amounted to $299,049.43. Deducting the cost of sewers abandoned, amounting to $6,609.25, leaves $292,440.18 to be added to the value of the system as of November 30, 1920.

The total value of the system on November 30, 1921, was accordingly $2,318,692.48 and embraced a total of 163.81 miles of sewer in the care of this department.

The amount expended in repairs to the system was $7,185.90; cleaning, $6,289.10; and in flushing the same, $6,727.25. As usual all sewer construction during the year has been done directly by this division.

The receipts from entrance fees, exclusive of the fees on account of building private drains, amount to $22,804.42, and the number of connections made to buildings during the year was 408, an increase of 50 per cent over last year.

The length of concrete trunk sewers laid during the year was 7,391 feet and clay pipe sewers, 40,647 feet. There were also laid about 11,500 feet of pipe for connections to buildings.

The amount of construction work done this year, by far the largest in the history of the department, was made possible by an issue of bonds for sewer work, in addition to a liberal regular appropriation, and was also

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due to general business conditions which made available plenty of labor, and the best the division has had in its employ for several years. Every one seemed contented and willing to work and the results accomplished speak for themselves.

The larger construction jobs of the year were the following: The completion of a storm-water system for the section between State and Bay streets, from N. Y., N. H. & H. railroad to Carlisle Brook, which includes a culvert under State street, and open ditch 1,300 feet long from State street to Shattuck avenue, and 7,825 feet of mains in this section; a storm-water trunk sewer in East Springfield from Poor Brook to Ardmore street, 3,190 feet in length; and a trunk sewer in Pine street, Old Bay road, Duke street, and Pasco road, Indian Orchard, 3,165 feet long; also the relaying with modern material and larger capacity old cement pipe sewers in the streets that form the approaches to the new Connecticut River bridge.

The division has also relaid a number of sewers, the condition of which had become such that replacement was necessary. This included a number of sewers built by private parties and afterward taken over by the city, and also a number of old cement pipe sewers which were replaced with modern materials.

Maintenance work of the sewer system, now 164 miles in length, has been done as needed. Repairs, cleaning, and flushing have been carried on as required to keep up to the usual standard.

It gives me pleasure to acknowledge the hearty co-operation of all the employees of this division and to thank you for the support and courtesies at all times received from you.

Respectfully submitted,

HOWARD O. BUCK,
Deputy Superintendent of Sewer Division.

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SEWER CONSTRUCTION AND RECONSTRUCTION.

DESCRIPTION AND COSTS—FISCAL YEAR 1921.

Location.	Material.	Length in feet.	Size.	Total Cost.
*Andrew street, Burr to Dawes street,	Clay	305	24″	$2,574.95
*Armory street, Gold street northerly,	Clay	233	12″	943.59
Armory street, Sterling to Gold street,	Clay	306	18″	1,705.68
Armory street, Bevier to Beauchamp st.,	Clay	289	18″	1,429.85
Beauchamp street, Armory street easterly	Clay	275 275	12″ 10″	1,762.26
Blaine street, Audubon street to railroad, completion,	Clay	96	15″	896.87
Bronson terrace, Dickinson street westerly,	Clay	162	10″	282.37
*Burr street, Oak Grove avenue to Cambridge street,	Clay	443	24″	3,474.81
	Con.	458	36″ cir.	5,168.77
*Cambridge street, Burr to Bay street, storm water,	Clay	360 651 591	22″ 18″ 15″	6,784.49
Carew street, extension easterly,	Clay	175	10″	516.33
*Carlisle Brook, building open ditch, State street to Shattuck avenue,				9,026.86
*Carlisle Brook, culvert under State st.,				8,407.22
*Carlisle sanitary sewer, extension to Wilbraham road, completion,	Clay	18 1,821 66	20″ 18″ 12″	11,265.93
*Center street, Oak Grove avenue to Acorn street,	Clay	706 371	27″ 24″	9,298.03
*Central street, Sterns terrace to Madison avenue,	Clay	303	12″	793.80
*Cherryvale avenue, Longhill street easterly, relaying,	Clay	202 199	15″ 12″	1,934.55
*Chicopee road, extension northerly of Woodmont street,	Clay	150	10″	376.59
*Chicopee road, Roy street southerly, incomplete,	Clay	199 186	12″ 10″	289.87
*Chilson street, extension southerly,	Clay	340	10″	507.45
*Clermont street, I. O., extension easterly,	Clay	300	10″	710.34
*Colonial avenue, State street to Wilbraham road, relaying, incomplete,	Clay	260	15″	886.75
Commonwealth avenue, Fairview to Fern street,	Clay	250 552	12″ 10″	1,905.75

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SEWER CONSTRUCTION AND RECONSTRUCTION.—*Continued.*

Location.	Material	Length in feet.	Size.	Total Cost.
*Daviston street, extension to Rittenhouse terrace,	Clay	104 193 220	15″ 12″ 10″	$1,388.51
*Dawes street, Andrew to Bay street, stormwater,	Clay	452 254 304 292	20″ 18″ 15″ 12″	5,578.51
Dickinson street, Groveland street southerly,	Clay	202 341	18″ 15″	2,510.97
*Duke street, I. O., Oak street to Pasco road,	Con.	287	36″ cir.	2,828.98
Dwight road, Leslie street southerly,	Clay	250	12″	712.18
*Edgeland street, Longhill street easterly,	Clay	229	18″	1,219.53
Eldert street, Edgemont street easterly,	Clay	277	12″	1,079.69
Eloise street, southerly from Sumner avenue, completion,	Clay	83	10″	650.30
*Firglade avenue, Pineywoods to northerly of Spruceland avenue, relaying,	Clay	231 216 270	15″ 12″ 10″	2,965.66
*Florence street, Pine to Hancock street, relaying,	Clay	282 542 319 398	20″ 18″ 15″ 12″	9,491.63
*Fountain place, Wesson to Belvidere street,	Clay	420	12″	1,075.85
*Fountain place, Belvidere to Sylvan street,	Clay	269	12″	771.07
Glenwood street, Commonwealth avenue to Lawndale street,	Clay	228	12″	473.76
Gold street, Armory street easterly,	Clay	251 250	12″ 10″	1,570.45
*Gold street, Armory street extension to Hamburg street,	Clay	348	10″	666.48
*Grand street, Revere to Wareham street, relaying,	Clay	250 252	18″ 15″	2,452.01
*Griffin street, Eddy to Laurence street,	Clay	252	12″	798.73
*Kenwood Park, Belmont avenue northerly, westerly side, relaying,	Clay	285 246	12″ 10″	1,593.62
*Laurence street, Griffin street northerly,	Clay	249 228	12″ 10″	867.40

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SEWER CONSTRUCTION AND RECONSTRUCTION.—*Continued.*

Location.	Material.	Length in feet.	Size.	Total Cost.
*Lebanon street, northerly of Hancock to Eastern avenue, relaying,	Clay	255 628 278	20″ 18″ 15″	$8,887.94
Lincoln street, Magazine street easterly,	Clay	186	12″	1,030.32
*Longhill street dump,	Clay	294	12″	542.29
Longhill street, relaying between Longhill and Warner street,	Clay	148	10″	1,059.81
Los Angeles street, Milford to Hamburg street,	Clay	352 285	12″ 10″	2,161.22
*Lyons street, I. O., Clermont to South street,	Clay	449	10″	1,381.36
*Magnolia terrace, Pineywoods to Spruceland avenue, relaying,	Clay	268 334	15″ 12″	2,900.30
Manchester terrace, extension southerly,	Clay	296 342	15″ 12″	1,703.97
*Mapledell street, Burr street southerly,	Clay	386 275	12″ 10″	1,713.78
*Maplewood terrace, west of Riverview terrace to Forest Park avenue, relaying,	Clay	226 329 215	20″ 18″ 15″	4,061.64
Marlborough street, Carlisle Valley sewer to Wellington street,	Clay	1,409	10″	9,254.47
*Merrick avenue, King to Lebanon street, relaying,	Clay	279	12″	1,199.23
Milford street, extension Athol to Los Angeles street,	Clay	49	15″	251.64
*Monroe street, Hancock street easterly, relaying, incomplete,	Clay	611	24″	2,952.35
*Monrovia street, Page boulevard southerly,	Clay	1,086	10″	3,695.23
*Montrose street, Burr street southerly,	Clay	350 310	15″ 12″	2,240.32
*Morris street, extension to Central street	Clay	195	24″	1,701.04
Norfolk street, Marlborough street southerly,	Clay	600	10″	2,244.28
*Oak Grove avenue, Shattuck street southerly,	Clay	10 319	12″ 10″	991.12
*Oak Grove avenue stormwater, Shattuck to Bay street,	Clay	702 278 280 299	27″ 24″ 20″ 15″	11,324.05
*Oak Grove avenue, Shattuck to Bay street, stormwater,	Con.	208 260	48″ cir. 30″ cir.	6,656.50

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SEWER CONSTRUCTION AND RECONSTRUCTION.—*Continued.*

Location.	Material.	Length in feet.	Size.	Total Cost.
*Oak street, I. O., Old Bay road southerly,	Clay	1,547	12″	$4,322.20
*Oak street, I. O., Old Bay road northerly,	Clay	313	10″	959.11
*Old Bay road, Pine to Oak street, sanitary,	Con.	594	3′2″x4′9″ Elliptical	
		191	36″ cir.	7,074.97
Olmsted drive, Dickinson street westerly,	Clay	271	12″	832.40
*Ozark street, Grand street southerly, relaying,	Clay	229	12″	
		227	10″	1,437.89
*Page boulevard, Poor Brook to Ardmore street, stormwater,	Con.	425	36″ cir.	
		1,234	63″ cir.	
		842	57″ cir.	
		325	45″ cir.	55,687.35
		365	3′2x4′9 Ellip.	
*Pasco road, I. O., Duke street southerly,	Con.	543	32″ cir.	
		816	30″ cir.	15,057.64
*Pasco road, I. O., Duke street southerly,	Clay	149	24″	677.64
*Pasco road, I. O., Duke street northerly,	Clay	414	12″	1,279.71
Pecousic avenue, extension southerly,	Clay	299	18″	
		180	15″	2,454.04
Penacook avenue, Governor to Woodmont street,	Clay	147	12″	363.95
*Pine street, I. O., south of Franklin street to Old Bay road,	Con.	584	4′2″x6′3″ Elliptical	12,513.02
*Prince street, King to Lebanon street, relaying,	Clay	329	12″	1,543.33
*Princeton street, Vassar street westerly,	Clay	222	12″	617.02
*Revere street, Grand to Orange street, relaying,	Clay	250	12″	
		253	10″	1,954.53
*Roy street, Liberty street to Chicopee road,	Clay	160	15″	688.97
Sachem street, Orange street southerly,	Clay	147	12″	688.88
*Shattuck avenue, College street to Oak Grove avenue, stormwater,	Con.	259	48″ cir.	6,454.78
Spencer avenue, extension southerly,	Clay	84	10″	402.09
*Stafford street, Cass street easterly,	Clay	285	12″	992.95
*Sylvan avenue, extension southerly,	Clay	350	12″	1,126.51
Vernon street, Water street east of Broadway, relaying,	Clay	400	15″	2,657.38
*Wareham street, Grand street southerly, relaying,	Clay	292	12″	
		184	10″	1,642.68

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SEWER CONSTRUCTION AND RECONSTRUCTION.—*Concluded.*

Location.	Material.	Length in feet.	Size.	Total Cost.
*Washington road, Pineywoods avenue northerly, relaying,	Clay	281	15″	$1,512.49
Water street, Pynchon street to north of Wight place, relaying,	Clay	252 213 186	18″ 15″ 10″	4,602.16
*Wesson street, Fountain place westerly,	Clay	349	10″	954.27
Wight place, Water street to Broadway, relaying,	Clay	302	12″	1,501.81
Woodmont street, Penacook avenue to Liberty street,	Clay	451	12″	1,128.77
Woodmont street, Liberty street easterly,	Clay	301 328 152	15″ 12″ 10″	3,370.74
Total sewer construction, 1921,				$312,090.58

*Cost covered by bond issue. (See recapitulation of Capital Accounts.)

NOTE:—The costs of the above described sewers include the costs of manholes, wellholes, and flush gates.

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CONSTRUCTION—MANHOLES.

Location.	Total Cost.
*Andrews street,	$258.98
*Cedar street,	168.95
*James street,	205.25
*King street,	99.19
*King street,	170.68
*Marengo Park,	134.44
*Norwood street,	190.77
*Palmer avenue,	113.56
Suffolk street,	44.90
*Taylor street extension,	105.36
Total,	$1,492.08

CONSTRUCTION—WELLHOLES.

Location.	Total Cost.
*Albany street,	$302.43
*Armory street,	29.47
*Belmont avenue,	54.87
*Belvidere street,	453.76
Bristol street,	162.36
*Broadway extension,	351.34
Central street,	65.86
Dover street,	85.37
East Alvord street,	66.04
*Los Angeles avenue,	147.13
Princeton street,	129.71
*South Main street,	82.92
State street,	43.83
Suffolk street,	174.38
*Summer street,	124.22
*Taylor street at Dwight street,	26.64
*Taylor street extension,	423.58
Washington street (completion),	33.77
West Alvord street,	62.07
Wigwam place,	70.64
*Wilbraham road,	39.32
Total,	$2,929.71

*Sewer Construction, 1921 Account.

CONSTRUCTION—FLUSH GATES.

Location.	Total Cost.
Bristol street,	$83.71
Denton circle,	79.88
Kimberly avenue,	80.71
Main street,	187.31
Washington street,	81.82
Total,	$513.43

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SEWER CONSTRUCTION CLASSIFIED.

VITRIFIED CLAY PIPE.

Sizes.	Length in Feet.		Total Length.
	New Construction.	Reconstruction.	
10″	8,695	1,409	10,104′
12″	9,974	2,894	12,868′
15″	3,108	2,882	5,990′
18″	4,051	2,001	6,052′
20″	750	763	1,513′
22″	360	....	360′
24″	1,741	611	2,352′
27″	1,408	....	1,408′
Total,	30,087	10,560	40,647′

CONCRETE.

Sizes.	Length in Feet.		Total Length.
	New Construction.	Reconstruction.	
36″ circular,	1,361	....	1,361′
48″ circular,	467	....	467′
30″ circular,	1,076	....	1,076′
3′2″x4′9″ elliptical,	959	....	959′
4′2″x6′3″ elliptical,	584	....	584′
32″ circular,	543	....	543′
63″ circular,	1,234	....	1,234′
57″ circular,	842	....	842′
45″ circular,	325	....	325′
Total,	7,391	....	7,391′

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ABANDONED SEWERS—1921.

Location.	Material.	Length in feet.	Size.	Total Cost.
Cherryvale avenue, Longhill street easterly,	Clay	401	10″	
Colonial avenue, State street southerly,	Clay	260	12″	
Firglade avenue, between Sumner avenue and Spruceland avenue,	Clay	203	8″	
Pineywoods avenue to Spruceland avenue	Clay	447	10″	
		67	8″	
Florence street, Pine street easterly,	Cem.	824	15″	$2,227.38
		651	12″	
Grand street, Revere street easterly,	Clay	252	12″	
		250	15″	
Kenwood Park, from south end of park, northerly, westerly side,	Clay	531	10″	
Lebanon street, northerly of Hancock street to Eastern avenue,	Cem.	345	18″	1,509.20
		816	15″	
Longhill street, between Longhill street and Warner street,	Clay	148	10″	150.00
Magnolia terrace, Pineywoods to Spruceland avenue,	Clay	602	12″	
Maplewood terrace, west of Riverview terrace to near Forest Park avenue,	Clay	226	15″	
		329	12″	
		178	10″	
Merrick avenue, King street southerly,	Cem.	275	12″	
Monroe street, Hancock street easterly,	Cem.	611	18″	867.62
Ozark street, Grand street southerly,	Clay	456	10″	
Prince street, King to Lebanon street,	Cem.	329	12″	333.15
Princeton street, Vassar street westerly,	Cem.	128	12″	
Revere street, White street southerly,	Clay	250	10″	
		209	8″	
Vernon street, Water street easterly,	Cem.	400	15″	524.17
Wareham street, Grand street southerly,	Clay	419	10″	
Washington road, Pineywoods avenue northerly,	Clay	281	10″	
Water street, Pynchon street northerly,	Cem.	257	18″	
		329	15″	997.73
		61	12″	
Wight place, Water street easterly,	Clay	25	10″	
Total,		10,560		$6,609.25

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SUMMARY.

Description.	Length in feet.	Cost.
Clay pipe sewers built by regular appropriation,...	11,642	$51,204.39
Clay pipe sewers built by special appropriation,...	29,005	115,991.31
Concrete sewers built by special appropriation,....	7,391	126,918.51
Flush gates, manholes, and wellholes built by regular appropriation,.....	.....	1,452.36
Manholes and wellholes built by special appropriation,.....	.....	3,482.86
	48,038	$299,049.43
Sewers abandoned,.....	10,560	6,609.25
Total,.....	37,478	$292,440.18

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SEWER CLEANING AND REPAIRS.

	COST OF	
	Cleaning.	Repairs.
Adams street,	.....	$18.41
Albany street,	.....	32.15
Albemarle street,	.....	11.64
Alden street,	.....	13.35
Alfred street,	.....	44.66
Allen avenue,	$12.51	.....
Allen street,	53.60	.....
Amaron street,	.....	7.78
Andrew street,	19.38	.....
Arbor street,	.....	7.78
Armory street,	.....	314.62
Ashmun street,	.....	22.86
Auburn street,	.....	12.14
Avon place,	.....	1.81
Banks place,	.....	2.13
Bay street,	.....	143.30
Beacon street,	25.65	6.71
Beaumont street,	66.77	3.65
Beechwood avenue,	27.71	.....
Belmont avenue,	.....	89.38
Benton place,	13.10	.....
Benton street,	57.44	...
Bond street,	38.33	.....
Boylston street,	.....	22.44
Bridge street,	.....	.69
Bristol street,	.....	227.46
Broad street,	21.33	74.00
Brookline avenue,	19.24	.....
Butler street,	.....	12.66
Carew street,	.....	584.43
Carlisle street,	19.38	.....
Central street,	.....	287.21
Cherryvale avenue,	38.11	.....
Chestnut street,	.....	62.76
Churchill street,	29.73	.....
Clantoy street,	43.29	23.15
Cleveland street,	.....	17.34
Cliftwood street,	12.70	.....
College street,	20.85	.....
Colonial avenue,	63.50	.....
Colton street,	41.99	4.87
Commonwealth avenue,	187.67	3.70
Congress street,	24.06	10.93
Continental street,	13.69	.....
Cornell street,	20.53	.....
Crane street,	.....	9.80
Crystal avenue,	9.69	.....
Daviston street,	.....	2.03
Dawes street,	.....	23.62

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SEWER CLEANING AND REPAIRS.—*Continued.*

	COST OF	
	Cleaning.	Repairs.
Dexter street,	.....	$95.27
Dickinson street,	.....	9.98
Donald street,	.....	37.78
East Alvord street,	.....	7.50
Eastern avenue,	$25.57	24.10
Elmwood street,	.....	17.64
Essex street,	.....	15.94
Essex street, I. O.,	.....	34.98
Eton street,	.....	16.81
Euclid avenue,	42.49	.....
Everett street,	.....	14.22
Federal street,	.....	22.95
Firglade avenue,	135.34	19.87
Fisk avenue,	.....	13.82
Florence street,	37.32	.....
Florentine Gardens,	32.63	.....
Forest street,	43.59	15.96
Forest Park avenue,	21.17	.....
Fort Pleasant avenue,	.....	9.26
Franklin street,	85.79	.....
Fulton street,	16.43	.....
Garden Brook sewer,	2,181.96	.....
George street,	16.64	.....
Girard avenue,	58.13	.....
Glendell terrace,	.....	1.71
Grace street,	.....	27.43
Grand street,	34.92	163.82
Gray's avenue,	.....	67.52
Greenleaf street,	28.91	.....
Greenwood street,	19.24	25.66
Grenada terrace,	.....	23.35
Grove street,	.....	35.62
Groveland avenue,	.....	15.29
Hall street,	9.69	.....
Hamburg street,	.....	18.44
Hampden street, I. O.,	.....	15.02
Hampshire street, I. O.,	47.28	62.92
Hancock street,	.....	9.44
Harriet street,	28.86	.....
Harvard street,	9.62	.....
Hickory street,	.....	19.11
High street,	11.49	.....
Holyoke street,	.....	9.95
Huntington street,	.....	13.51
Jenks street,	.....	6.35
John street,	83.40	.....
Keith street,	16.64	.....
Kensington avenue,	.....	4.12
Kenwood Park,	19.51	.....

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SEWER CLEANING AND REPAIRS.—*Continued.*

	COST OF	
	Cleaning.	Repairs.
Kimberly avenue,	.....	$23.28
Lafayette street,	$12.49	.....
Lebanon street,	62.82	81.01
Ledyard street,	.....	34.42
Leete street,	.....	24.57
Lenox street,	12.56	.....
Liberty street,	.....	51.59
Lincoln street,	30.50	4.74
Linden street,	.....	11.34
Lombard street,	.....	3.65
Longhill street,	.....	158.14
Lowell street,	.....	15.89
Magazine street,	.....	7.75
Magnolia terrace,	99.05	.....
Main street,	411.19	128.57
Malden street,	9.76	47.69
Manhattan street,	.....	4.87
Manitoba street,	.....	12.53
Maple street,	16.64	12.11
Mapledell street,	4.85	7.51
Maplewood terrace,	24.21	.....
Marble street,	.....	31.77
Marengo Park,	58.13	44.37
Margaret street,	45.88	.....
Massachusetts avenue,	.....	11.64
Massasoit place,	.....	24.58
Medford street,	.....	98.18
Melrose street,	.....	102.70
Merrick avenue,	15.37	.....
Middlesex street,	.....	15.56
Mill street,	.....	30.37
Monroe street,	.....	6.33
Montrose street,	19.38	.....
Mountainview street,	19.38	.....
Myrtle street,	.....	30.51
Myrtle street, I. O.,	.....	29.41
Newland street,	.....	11.60
Norfolk street,	.....	21.77
Northampton avenue,	24.21	61.45
North Main street,	.....	41.75
Norwood street,	15.98	158.43
Oak street,	.....	10.19
Oak street, I. O.,	76.19	65.07
Olive street,	19.67	.....
Orange street,	31.27	34.05
Ozark street,	38.44	61.94
Page boulevard,	.....	25.47
Palmer avenue,	.....	4.87
Parker street, I. O.,	134.16	83.70

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SEWER CLEANING AND REPAIRS.—*Continued.*

	COST OF	
	Cleaning.	Repairs.
Parkside avenue,	.....	$25.38
Parkwood street,	$15.28	18.56
Pasadena street,	.....	1.83
Patton street,	19.24	.....
Pearl street,	.....	16.67
Pecousic avenue,	.....	53.17
Pendleton avenue,	42.63	.....
Pine street,	.....	46.19
Pine street, I. O.,	.....	14.43
Plainfield street,	.....	19.99
Plymouth street,	.....	12.81
Portland street,	.....	9.48
Prince street,	14.49	.....
Princeton street,	.....	14.58
Pynchon street,	.....	41.14
Randolph street,	24.21	.....
Reed street,	14.53	.....
Revere street,	25.22	.....
Richelieu place,	17.40	.....
Rochelle street,	.....	11.08
Sargeant street,	.....	35.21
Scott street,	.....	7.78
Seventh street,	.....	96.27
Sharon street,	22.76	4.97
Shattuck street,	.....	13.93
Sherman avenue,	.....	8.05
Sorrento street,	.....	27.45
Spring street,	.....	48.08
Spruceland avenue,	31.91	1.87
State street,	.....	62.90
Suffolk street,	.....	155.69
Sumner avenue,	.....	277.86
Sunapee street,	.....	6.25
Sundry streets,	664.47	.....
Tenth street,	9.62	.....
Terrence street,	.....	9.81
Thomas street,	.....	417.13
Thompson street,	45.46	35.32
Tracy street,	.....	27.35
Trinity terrace,	.....	19.64
Tyler street,	60.64	.....
Union street,	.....	54.51
Vermont street,	.....	5.85
Vernon street,	.....	44.91
Vine street,	.....	9.71
Vinton street,	.....	14.26
Walnut street,	.....	11.40
Water street,	.....	2.82
Webster street,	.....	14.22

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SEWER CLEANING AND REPAIRS.—*Concluded.*

	COST OF	
	Cleaning.	Repairs.
Westford avenue,	.....	$13.92
Westminster street,	.....	7.78
White street,	.....	124.94
Whitney place,	.....	4.05
Wilbraham avenue,	.....	7.78
Wilbraham road,	$175.08	45.43
William street,	.....	15.01
Woodlawn street,	.....	18.49
Woodworth avenue,	37.16	.....
Worcester avenue,	.....	6.65
Worcester street, I. O.,	.....	15.01
Worthington street,	.....	522.63
York street,	.....	95.49
Total,	$6,289.10	$7,185.90

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CITY OF SPRINGFIELD,

SEWER SYSTEM TABULATED TO DECEMBER 1, 1921.

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Abbe ave., Fisk ave., westerly	301	15″	Clay	$520.45	
	275	12″	Clay		
	300	18″	Clay		
Plainfield st., westerly	300	15″	Clay	1,446.64	
	301	12″	Clay		
	200	10″	Clay		
					$1,967.09
***Acorn st.**, Sycamore to Edgewood st	276	10″	Clay	176.64	
†Center to Edgewood st	66	24″	Clay	1,351.49	
	276	18″	Clay		
					1,528.13
Acushnet ave., Main st., easterly	294	20″	Clay		
	279	18″	Clay		298.94
	271	15″	Clay		
	26	12″	Clay		
Adams st., Main to Ashmun st	294	20″	Clay		
	245	18″	Clay	3,322.93	
	323	15″	Clay		
	221	12″	Clay		
Richelieu st., westerly	237	12″	Clay	304.12	
					3,627.05
Albany st., Armory st., easterly	1,083	5′-0″ cir.	Con.		19,947.73
	478	4′-3″ cir.	Con.		
	445	3′-9″ cir.	Con.		
Albemarle st., Wilbraham road, southerly	300	15″	Clay		
	314	12″	Clay	1,098.28	
	421	10″	Clay		
*Westford circle, northerly	564	10″	Clay	499.51	
*Gunn Square brook to Westford circle	329	12″	Clay	333.56	
*Gunn Square brook to King st	259	10″	Clay	268.14	
†From sewer across private land northerly to Westford circle	295	3′-0″ cir.	Con	3,477.08	
					5,676.57
Alberta st., Mansfield st., northerly	370	10″	Clay		877.13
Alden st., Hancock st. to	595	18″	Cem	1,861.38	
Eastern ave	820	15″	Cem.		
Eastern ave. to Wilbraham ave	895	15″	Clay	995.10	
Wilbraham ave. to Hickory st	499	10″	Clay	332.22	
					3,188.70

*Sanitary sewers. †Storm water.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Alderman st., Dickinson to Scott st.	296	18″	Clay		
	304	15″	Clay		$1,269.59
	300	12″	Clay		
	443	10″	Clay		
Alexander st., North st., easterly	288	10″	Clay		188.48
Alfred st., Birnie ave., easterly	377	10″	Clay		138.15
Allen ave., Allen st., easterly	338	10″	Clay		232.73
Allen st., Mill river to Oakland st.	216	24″	Clay	$576.86	
Mill to Oakland st.	365	10″	Clay	447.19	
Oakland st. to Plumtree road	686	24″	Clay	1,832.06	
	383	18″	Clay		
	474	15″	Clay	1,782.09	
	580	12″	Clay		
	1,603	12″	Clay	1,024.18	
	1,401	10″	Clay	1,132.05	
					6,794.43
Allendale st., North st., easterly	272	12″	Clay		401.43
	340	10″	Clay		
Amaron st., State st., southerly	349	10″	Clay		238.78
Amherst st., Harvard st., northerly	441	12″	Cem.	146.99	
	25	10″	Clay	23.78	
Princeton to Monmouth st.	512	12″	Clay	695.88	
	191	10″	Clay		
					866.65
Andrew st., State st., northerly	463	20″	Clay		
	422	18″	Clay	2,178.96	
	382	12″	Clay		
**Burr to Dawes st.	305	24″	Clay	2,574.95	
					4,753.91
Applewood place, Belmont ave., northerly	469	10″	Clay		391.81
Arbor st., Butler to Carew st.	398	12″	Clay		318.05
Arch st. (see Garden brook)					
*Ardmore st., Page boulevard to Bowles park.	1,486	10″	Clay		1,636.18
Armory hill sewer (see private ways).					
Armory st., Worthington st., southerly	570	15″	Cem.	754.98	
	199	12″	Clay	495.91	
Summer st., southerly	374	12″	Clay	384.78	
	325	10″	Clay	193.87	

* Sanitary sewer. **Stormwater.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
B.& A.R.R. to Liberty st.	690	15″	Clay		
	360	12″	Clay	$1,216.88	
	271	10″	Clay		
Liberty to Sullivan st....	450	1′-10″x2′-9″	Brick		
	476	1′- 8″x2′-6″	Brick	2,439.42	
Sullivan to Carew st.....	156	24″	Clay		
	267	20″	Clay	1,051.29	
	290	12″	Clay		
Carew st., northerly.....	452	20″	Clay		
	803	10″	Clay	1,255.27	
Sterling to Bevier st.....	290	24″	Clay	3,046.95	
Springfield st., southerly..	31	20″	Clay		
	146	18″	Clay	358.92	
Sterling to Gold st.....	306	18″	Clay	1,705.68	
Gold st., northerly.....	233	12″	Clay	943.59	
Bevier to Beauchamp st..	289	18″	Clay	1,429.85	
					$15,277.39
Ashley st., Cedar st., easterly.....	65	18″	Cem.	80.45	
	580	15″	Cem.		
	697	12″	Cem.	1,555.00	
					1,635.45
Ashmont st., Belmont ave., northeasterly.....	250	12″	Clay		
	200	10″	Clay		351.57
Ashmun st., Adams st., southerly.....	176	10″	Clay		350.48
Athol st., Milford st. to Chicopee line.....	600	15″	Clay		
	358	12″	Clay		1,537.97
Atwater terrace, Springfield st., northerly.....	1,020	18″	Clay		1,469.45
Atwater road, Green lane, westerly.....	322	20″	Clay		
	199	18″	Clay		....
Auburn st., Fulton st., easterly.....	397	12″	Clay		
	335	10″	Clay		772.02
Austin st., State st., northerly.....	363	10″	Clay		334.91
Autumn st., Summer to Worthington st.....	239	15″	Clay		715.29
Avon place, Maple st., easterly.....	695	24″	Clay		3,451.49
Banbury st., Stockman st., southerly.....	234	10″	Clay		188.81
Bancroft st., Garden brook to Chestnut st.....	1,361	3′-4″x5′-0″	Brick		
including Chestnut st., Bancroft to Montmorenci st.....	379	3′-2″x4′-9″	Brick		8,914.04
Montmorenci st., Chestnut st., easterly.....	43	3′-2″x4′-9″	Brick		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Banks place, Water st., westerly	235	10″	Clay		$791.96
Bartlett st., Massasoit place, northerly	235	10″	Clay		342.03
Baxter ave., Woodbine ave., westerly	300	10″	Clay		325.61
Bay st., St. James ave. to	250	15″	Clay		
Pleasant st	245	12″	Clay	$715.01	
	228	10″	Clay		
Florida to Pleasant st	235	12″	Clay	321.02	
Florida to Sherman st	304	20″	Clay		
	377	18″	Clay	1,092.89	
	812	15″	Clay	945.16	
Sherman to Clarendon st.	151	8″	Cem.	46.82	
Catharine to Clarendon st.	194	10″	Clay	200.66	
Bowles to Cambridge st.	1,037	2′-8″x4′-0″	Brick		
	360	2′-2″x3′-3″	Brick	8,290.44	
Cambridge to Sycamore st.	332	24″	Clay		
	360	20″	Clay	1,348.03	
					12,960.03
Bay st., I. O., Main to Lawe st	439	10″	Clay		786.38
Beacon st., Eastern ave. to Colton st	250	10″	Clay	179.24	
Colton st., easterly	106	8″	Clay	75.08	
					254.32
Beauchamp st., Armory st., easterly	275	12″	Clay		1,762.26
	275	10″	Clay		
Beaudry st., I. O., Main st., southerly	300	12″	Clay		745.95
	270	10″	Clay		
Beaumont st., Belmont ave., northerly	250	12″	Clay		
	431	10″	Clay	475.51	
Belmont ave. to Sumner ave	264	10″	Clay	183.91	
					659.42
Beaumont terrace, Beaumont st., easterly	271	10″	Clay		298.12
Beech st., Central st., northerly	427	10″	Cem.		124.37
Beechwood ave., Sumner to Spruceland ave	595	12″	Clay		19.09
Belgrade place, Walnut st., westerly	220	8″	Clay		
	140	6″	Clay		33.88
Belle ave., Chestnut st., easterly to Cass st	544	24″	Clay		
	300	15″	Clay		
	280	12″	Clay		2,951.54
	250	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Bellevue ave., Belmont ave., easterly	300	18″	Clay		
	300	15″	Clay	....	
	194	12″	Clay		
Dickinson st., westerly	744	10″	Clay	$30.67	
					$30.67
Belmont ave., Fort Pleasant ave., easterly	90	10″	Clay	93.92	
Mill river to Woodside ter.	954	20″	Clay	2,713.44	
Woodside ter. to Litchfield st	660	2′- 0″x3′-0″	Brick		
	445	1′-10″x2′-9″	Brick	11,978.81	
	595	1′- 8″x2′-6″	Brick		
	550	1′- 6″x2′-3″	Brick		
Litchfield st. to Kenwood Park	432	20″	Clay	1,682.59	
	493	18″	Clay		
Kenwood Park to Sumner ave	301	15″	Clay		
	403	12″	Clay	901.28	
	616	10″	Clay		
*Sumner ave. to Woodlawn st	830	3′- 4″x5′-0″	Brick	8,216.97	
	819	3′- 0″x4′-6″	Brick		
	245	3′- 0″x4′-6″	Br.C.	3,470.41	
	416	2′-10″x4′-3″	Br.C.		
*Woodlawn to White st	1,637	2′-10″x4′-3″	Con.	7,292.20	
					36,349.62
Belmont place, Belmont ave., southerly	216	10″	Clay		192.92
Belvidere st., Belmont ave. to Blake st	300	20″	Clay		
	362	18″	Clay		2,776.18
	318	15″	Clay		
	330	12″	Clay		
Benton place, Benton st., easterly	300	10″	Clay		360.43
	325	8″	Clay		
Benton st., State st., southerly	301	12″	Clay		
	300	10″	Clay	513.96	
	247	8″	Clay		
	320	8″	Clay	419.68	
					933.64
Berendo st., Grenada terrace to Alderman st	345	12″	Clay		375.60
Berkeley st., Princeton to Monmouth st	483	12″	Clay		582.51
Berkshire st., I. O.					
Oak to Myrtle st	701	12″	Cem.	946.21	
Oak st., easterly	387	12″	Clay	389.89	
Chestnut to Myrtle st	577	12″	Clay	625.30	
Chestnut st., westerly	278	12″	Clay	542.99	
	180	10″	Clay		
					2,504.39

*Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Besse place, Main st., westerly	290	10″	Clay		....
Bethel st., Brunswick st., easterly	300	10″	Clay		$228.90
†**Beverly st.,** Northampton to Wilbraham ave.	250	12″	Clay		539.39
Bevier st., Armory st., northeasterly	399	12″	Clay		1,827.15
	254	10″	Clay		
Biltmore st., Dickinson st. to Trafton road	350	15″	Clay		905.28
	349	12″	Clay		
	351	10″	Clay		
Birnie ave., Wason ave., northerly and easterly	896	24″	Clay	$1,534.02	
to North Main st.	174	15″	Clay		
Wason ave., southerly	350	18″	Clay	1,024.75	
	417	15″	Clay		
Worcester st. extension, northerly to Grace st.	162	15″	Cem.	72.28	
Worcester st. extension, southerly to Walter st.	144	12″	Cem.	36.15	
Douglas st., northerly	292	24″	Clay		
	303	20″	Clay	1,265.17	
	304	15″	Clay		
	144	10″	Clay		
Douglas st. to near Hooker st.	373	1′-10″x2′-9″	Brick	1,319.73	
	312	20″	Clay	768.74	
	316	18″	Clay		
	342	15″	Clay	576.67	
Arch to Hooker st.	1,048	24″	Clay	37.11	
					6,634.62
Birnie ave. extension, Arch st., southerly	445	10″	Clay		....
Blaine st., White st. to N. Y., N. H. & H. R. R.	373	24″	Clay	850.08	
	1,067	15″	Clay	5,045.02	
					5,895.10
Blake hill, Fort Pleasant ave., easterly	244	10″	Clay		236.22
Bliss st., from Main st. to N. Y., N. H. & H. R. R.	1,284	12″	Cem.		1,824.55
Bloomfield st., Oakland to Earl st.	500	18″	Clay	1,692.55	
	527	15″	Clay		
Earl st. to Pasadena ave.	550	12″	Clay	917.72	
	273	10″	Clay		
					2,610.27
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.).	203	12″	Cem.		....

†Storm water.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Bond st., Garden brook	341	2′-0″x3′-0″	Brick	$1,580.25	
sewer to Chestnut st...	959	24″	Clay	2,285.89	
					$3,866.14
Bowdoin st., Worthington	660	15″	Cem.	762.11	
st., southerly.....	285	12″	Clay	371.52	
Worthington st to Inger-					
soll grove.....	819	12″	Cem.	758.64	
					1,892.27
Bowles st., Bay to Mc-	695	15″	Cem.	1,083.39	
Knight st.....	64	15″	Clay	136.50	
Pease st., northerly.....	275	8″	Clay	62.76	
					1,282.65
***Bowles park**, Ardmore st.,					
easterly.....	342	10″	Clay		241.39
Boylston st., Cypress to	610	18″	Cem.		1,656.24
Clinton st.....	346	15″	Cem.		
Bradford st., North Main	352	15″	Cem.		3,790.58
to Fulton st.....	758	12″	Clay		
Bridge st., Main st. to	798	12″	Cem.	762.38	
Conn. river.....	275	15″	Clay	429.14	
Main to Chestnut st.....	1,158	2′-0″x3′-0″	Brick	5,414.20	
					6,605.72
Brightwood ave., Plainfield					
st., westerly.....	221	15″	Clay		237.94
Bristol st., Wilbraham road	299	15″	Clay	845.54	
to Marlborough st.....	560	12″	Clay		
Marlborough st., south-					
erly.....	552	10″	Clay	293.99	
					1,139.53
Broad st., Hanover to Main					
st.....	970	15″	Cem.		1,401.19
Bronson terrace, Dickin-					
son st., westerly.....	162	10″	Clay		282.37
Brookline ave., North st.,	328	12″	Clay		29.57
easterly.....	171	10″	Clay		
Brooklyn ave., Sumner					
ave., southerly.....	423	12″	Clay		329.56
Brown st., Yale to Bay st..	483	10″	Cem.		357.65
	21	8″	Cem.		
Brunswick st., Brooklyn					
ave., southerly.....	307	10″	Clay	190.48	
Blaine to Bethel st.....	251	18″	Clay		
	252	15″	Clay	1,031.89	
	252	12″	Clay		
Bethel st., northerly....	225	10″	Clay	237.07	
					1,459.44

* Sanitary sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Bryant st., Belmont to Sumner ave	274	15″	Clay		
	301	12″	Clay		$763.96
	300	10″	Clay		
Buckingham place, Bay st., westerly	235	10″	Clay		168.97
Buckingham st., Bay to Clarendon st	651	12″	Clay		
Bay st., southerly	35	12″	Cem.	$597.24	
State to Bay st	305	18″	Clay		
	345	15″	Clay	1,158.40	
	675	12″	Clay		
					1,755.64
Burlington st., Belmont ave., northerly	137	10″	Clay		72.61
Burr st., Andrew st., easterly	570	12″	Clay	499.91	
**Oak Grove ave., to Andrew st	458	3′-0″ cir.	Con.	5,168.77	
	443	24″	Clay	3,474.81	
					9,143.49
Burton st., White st. to Kimberly ave	527	12″	Clay		
	180	10″	Clay		750.94
Butler st., Chestnut to Cass st	1,268	20″	Clay	2,119.54	
Cass st., easterly	321	20″	Clay	520.71	
					2,640.25
Calhoun st., North Main to North st	853	12″	Clay	701.77	
North st., easterly	300	8″	Clay	262.38	
					964.15
Cambridge st., Bay st., southerly	276	20″	Clay		
	331	18″	Clay	1,204.43	
	266	15″	Clay		
	302	12″	Clay		
	278	10″	Clay	411.63	
Burr st., northerly	162	10″	Clay	142.44	
**Burr to Bay st	360	22″	Clay		
	651	18″	Clay	6,784.49	
	591	15″	Clay		
					8,542.99
Card-factory pond (see private ways).					
Carew st., Main st. to Garden brook (cost shown under Clinton st.)	*250	4′-6″x6′-9″	Brick	....	
	32	5′-0″ cir.	Brick	....	
	1,456	4′-3″ cir.	Brick		
Garden brook to Prospect st	1,257	3′-0″ cir.	Brick	22,106.89	
	791	2′-8″ cir.	Brick		

*Elliptical. **Storm water.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Massasoit st., easterly...	580	18″	Cem.	$671.51	
	200	12″	Cem.	153.28	
Prospect to Armory st....	989	2′-8″ cir.	Con.	8,638.14	
	1,365	2′-6″x3′-9″	Con.		
Armory to Liberty st....	1,686	2′-2″x3′-3″ egg	Con.	5,955.05	
Liberty st., easterly.....	502	15″	Clay		
	499	12″	Clay	2,554.36	
	1,068	10″	Clay		
					$40,079.23
Carlisle st., Wilbraham road, southerly.....	400	10″	Clay		355.69
	246	8″	Clay		
Carlton st., Woodlawn st., westerly	264	12″	Clay		846.53
	102	10″	Clay		
Caseland st., Springfield	446	15″	Clay	1,706.54	
to Shefford st.....	462	12″	Clay		
Shefford to Armory st...	*270	4′6″x3′0″	Con.	3,808.56	
					5,515.10
Cass st., Liberty to Franklin st.....	500	12″	Clay	575.28	
	163	10″	Clay		
Linden st., southerly.....	596	15″	Clay	892.07	
Linden st., northerly.....	224	12″	Clay		
					1,467.35
Castle ave., Sumner ave., southerly.....	526	12″	Clay		1,232.10
	260	10″	Clay		
Catharine st., Dartmouth to McKnight st.....	833	2′-0″x3′-0″	Brick	4,500.61	
State to McKnight st....	348	15″	Clay		
	438	12″	Clay	1,348.95	
	333	10″	Clay		
					5,849.56
Cedar st., Pine to Walnut st.....	180	3′-10″x5′-9″	Brick	889.35	
	1,074	3′- 8″x5′-6″	Brick	6,375.68	
Pine st., westerly.....	378	12″	Cem.	324.09	
					7,589.12
Cedar st., I. O., Main st. to river.....	433	2′-0″x3′-0″	Brick	2,001.44	
Main to Centre st.....	274	12″	Clay	263.92	
					2,265.36
Cemetery brook (see private ways).					
Center street, Oak Grove ave., northerly.....	1,008	10″	Clay		525.25
Centre st., I. O., Oak to Pine st.....	463	12″	Cem.	546.58	
Pine to Cedar st.....	349	12″	Clay	668.19	
	300	10″	Clay		
Cedar st., easterly.....	519	10″	Clay	474.04	
					1,688.81

* Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Central st., Main st., easterly	99	15″	Cem.	$147.60	
	546	12″	Cem.	385.49	
Main to Maple st.	63	2′-0″x3′-0″	Brick	119.57	
	463	2′-0″x3′-0″	Con.	2,332.17	
	*41	1′-10″x2′-9″	Con.	452.04	
	460	24″	Clay	2,665.22	
	434	20″	Clay		
near Maple st. to Sterns terrace	549	18″	Clay	916.26	
	105	12″	Clay	199.95	
Sterns terrace to Cedar st.	334	18″	Cem.	135.43	
	303	12″	Clay	793.80	
Pine st., westerly	500	12″	Cem.	600.73	
Pine to Spruce st.	339	12″	Cem.	492.47	
	335	12″	Clay	707.63	
	310	10″	Clay		
Spruce to Hancock st.	861	20″	Clay	1,401.59	
Hancock to Mill st.	597	2′-0″x3′-0″	Brick	2,135.31	
Mill st. to Mill river	40	24″	Clay	136.83	
					$13,622.09
Chapel st., Eastern ave., easterly	400	10″	Clay		314.19
Chapin terrace, Chestnut st., easterly	327	15″	Clay	1,124.82	
	279	12″	Clay		
*Marvin st., easterly	430	2′-4″x3′-6″	Con.	2,644.15	
					3,768.97
Charles st., Liberty to Franklin st.	27	12″	Clay	647.16	
	620	12″	Cem.		
Liberty st., southerly	29	12″	Clay	12.94	
					660.10
Charter ave., Walnut st., easterly	527	12″	Clay		564.24
Chase ave., Fort Pleasant ave., easterly	238	12″	Clay		24.49
	333	10″	Clay		
Cherrelyn ave., Phœnix st., southerly	300	15″	Clay	410.62	
	651	12″	Clay	574.73	
	50	10″	Clay	71.01	
					1,056.36
Cherry st., Mill river to Central st.	398	18″	Clay		1,557.17
	434	15″	Clay		
	251	12″	Clay		
	295	10″	Clay		
Cherryvale ave., Longhill st. to Florentine gardens	202	15″	Clay		2,438.23
	199	12″	Clay		
	195	10″	Clay		
Chester st., Mill st., northerly	459	12″	Clay	549.83	
	161	10″	Clay	....	
	112	8″	Clay		549.83

*Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Chestnut st., Edwards st., southerly	575	12″	Cem.	$595.03	
Mattoon st., southerly	288	15″	Cem.	319.69	
Pearl to Mattoon st.	313	1′-4″x2′-0″	Brick	445.40	
Pearl to Bridge st.	143	1′-8″x2′-6″	Brick	599.51	
Bridge to Worthington st.	480	2′-0″ cir.	Brick	....	
Worthington to Bridge st.	353	24″	Clay	1,175.53	
Worthington to Taylor st.	60	18″	Cem.	387.07	
	244	12″	Cem.		
Lyman to Liberty st.	134	18″	Cem.	997.90	
	72	12″	Cem.		
	258	12″	Clay		
Ferry st., northerly	150	12″	Clay	767.51	
Franklin st., southerly	488	12″	Cem.	378.49	
Franklin to Greenwood st.	224	24″	Clay	1,248.43	
Greenwood st., northerly	242	12″	Clay	1,038.03	
Essex to Everett st.	374	15″	Cem.	586.72	
Carew st., southerly	126	8″	Clay	100.68	
Carew to Prospect st.	424	24″	Clay	1,618.64	
	537	20″	Clay		
Prospect st., northerly	220	12″	Cem.	251.23	
Bancroft st., southerly	172	12″	Cem.	123.00	
	108	12″	Clay	190.55	
	19	10″	Clay		
Bancroft to Montmorenci st.	391	15″	Cem.	535.24	
Bancroft to Montmorenci st. (see Bancroft st.)	....	3′-2″x4′-9″	Brick	....	
Montmorenci to Waverly st.	185	12″	Cem.	1,100.74	
	717	12″	Clay		
Douglas st., southerly	450	10″	Clay	432.05	
Douglas to Springfield (see Springfield st.)	....	3′-6″ cir.	Brick	....	
Merwin st., southerly	178	10″	Clay	30.88	
Eagle st., northerly	87	15″	Clay	....	
Eagle st., southerly	171	10″	Clay	37.82	
Noble to Jenks st.	341	12″	Clay	726.25	
					$13,686.39
Chestnut st., I. O., Worcester to Hampden st.	342	15″	Cem.	340.25	
Hampden to Berkshire st.	30	15″	Clay	55.26	
	307	15″	Clay	342.65	
					738.16
Chicopee road, land of B. & A. R. R., easterly to St. James ave.	*1,170	2′-10″x4′-3″	Con.	6,574.76	
Land of B. & A. R. R., westerly to Eddy st.	450	2′-2″x3′-3″	Con.	7,181.27	

* Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Carew st., southerly	656	10″	Clay	$1,033.72	
Carew st., northerly	601	10″	Clay	768.50	
Roy st., southerly	199	12″	Clay	289.87	
	186	10″	Clay		
					$15,848.12
Chilson st., Sumner ave., southerly	644	10″	Clay		759.73
Church st., Garden brook to North st.	636	18″	Clay		1,731.13
Churchill st., Sumner ave. to Garfield st.	580	12″	Clay	151.22	
	55	8″	Clay	6.89	
					158.11
Clantoy st., Phœnix to Dupont st.	398	15″	Clay		
	517	12″	Clay		1,221.21
	366	10″	Clay		
Claremont st., Orange st., southerly	492	10″	Clay		264.58
Clarendon st., Worthington st., westerly	205	10″	Clay	225.80	
Worthington to St. James ave.	336	18″	Cem.		
St. James ave. to Sherman st.	280	15″	Clay	1,859.31	
	605	12″	Clay		
					2,085.11
Clark st., Hancock st., westerly	520	10″	Clay		531.80
Clayton st., Plainfield st., westerly	299	18″	Clay	583.76	
	322	15″	Clay	497.83	
	315	12″	Clay	688.43	
	320	10″	Clay		
					1,770.02
Clermont st., I. O., Healey ave., easterly	450	10″	Clay		833.62
Cleveland st., Armory to Liberty st.	274	18″	Clay		
	250	15″	Clay		
	276	12″	Clay		790.48
	284	10″	Clay		
Clifford st., Bay st., northerly	250	12″	Clay		357.34
	119	10″	Clay		
Clifton ave., Central st., southerly	398	8″	Clay		134.54
Cliftwood st., Sumner ave., southerly	464	10″	Clay		65.99
Clinton st., Fulton to Boylston st.	150	10″	Clay	11.07	
Boylston st., easterly	410	12″	Cem.	441.52	
submerged outlet	176	24″	W'd	2,207.90	
	24	24″	C-ir.		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Conn. river to Fulton st..	593	4′-10″x7′-3″			
Fulton st., Clinton to Sargeant st.....					
Sargeant st., Fulton to Main st.....			Brick	$26,137.87	
Carew st., Main st. to Garden brook.....					
(For lengths and sizes see individual streets.)....					
					$28,798.36
Clyde st., Plainfield st.,	350	18″	Clay		
westerly.....	350	15″	Clay		1,587.01
	271	12″	Clay		
Clyfton ave., Washington st., southerly.....	30	15″	Clay		162.74
College st., State to Shattuck st.....	839	12″	Clay	662.25	
*Shattuck to State st...	519	20″	Clay	3,160.96	
*Shattuck to Acorn st..	300	18″	Clay	2,619.15	
	610	15″	Clay		
†Shattuck to Acorn st.	311	12″	Clay	457.62	
	900	10″	Clay		
State st. to Wilbraham road.....	34	12″	Clay	387.72	
	443	10″	Clay		7,287.70
Collins st., Eastern ave. to	300	12″	Clay		
Logan st.....	269	10″	Clay		457.04
Colonial ave., State st.,	260	15″	Clay	886.75	
southerly.....	66	12″	Clay	69.22	
	348	10″	Clay		955.97
Colton st., Wilbraham road	448	18″	Clay		
to Beacon st.....	569	15″	Clay		2,048.71
	658	12″	Clay		
Columbia terrace, Liberty st., north and east.....	498	10″	Clay		....
Commonwealth ave., Belmont to Washington	441	24″	Clay		
ave.....	500	20″	Clay	3,011.11	
	549	18″	Clay		
Washington ave. to Fairview st.....	691	15″	Clay	720.72	
Fairview to Fern st.,.....	250	12″	Clay	1,905.75	
	552	10″	Clay		5,637.58
Concord terrace, Wilbraham road, northerly...	253	10″	Clay		353.06
Congress st., Garden brook	53	12″	Cem.	75.46	
to Main st.....	319	12″	Clay	705.44	

*Storm water sewer. †Sanitary sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Garden brook to Chestnut st.	133	20″	Clay		
	198	18″	Clay	$1,463.00	
	369	15″	Clay		
	288	12″	Clay		
	119	15″	Cem.	277.22	
	76	10″	Cem.		
					$2,521.12
Connecticut ave., Farnsworth st., southerly	221	10″	Clay		177.05
Continental st., Sumner ave., southerly	215	12″	Clay		102.05
	266	10″	Clay		
Converse st., Sumner ave. to Vermont st.	506	18″	Clay		550.47
Cook's ave., Worthington st. to N. Church ave.	117	15″	Cem.		
N. Church ave., southerly (includes cost of N. Church ave.)	69	10″	Cem.		672.96
Coomes st., Leete st., southerly	421	12″	Clay		2,196.86
	60	8″	Clay		
Cornell st., Dartmouth terrace to Wellesley st.	185	15″	Clay		
	374	12″	Clay	543.05	
Wellesley st., easterly	186	10″	Clay	208.20	
Princeton st., westerly	52	10″	Cem.	47.30	
	86	8″	Clay	88.04	
Princeton st., easterly	181	10″	Cem.	132.12	
	120	10″	Clay	180.93	
					1,199.64
Cortland st., State st., northerly	164	15″	Clay		
	621	12″	Clay	826.36	
*Shattuck to State st.	304	15″	Clay		
	346	12″	Clay	1,759.63	
					2,585.99
Cottage ave. (see Melrose st.)					
Court st., Court Square ave., westerly	461	12″	Cem.	621.55	
Main st. to Court Sq. ave.	200	12″	Cem.	357.46	
					979.01
Crane st., Franklin st., northerly	438	10″	Clay		725.69
Crosby st., Walnut st., westerly	321	10″	Clay		231.38
Cross st., Main to Willow st.	388	18″	Clay	951.12	
Willow st., easterly	363	12″	Cem.	352.25	
					1,303.37
Crossett lane, Willow st., westerly	169	10″	Clay		363.15

*Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Crown st., White st., easterly	341	15″	Clay		
	135	12″	Clay		$932.22
	91	10″	Clay		
Crystal ave., Belmont ave., easterly	251	15″	Clay		
	250	12″	Clay	$24.07	
	298	10″	Clay		
*Dickinson st., westerly	362	15″	Clay		
	372	12″	Clay	650.64	
					674.71
Cumberland st., Chestnut st., westerly	167	10″	Clay	125.29	
North Main to North st.	205	15″	Clay	300.96	
	238	12″	Clay	284.06	
					710.31
Cypress ave., Cypress st., northerly	360	12″	Cem.	484.08	
	40	12″	Clay	23.78	
					507.86
Cypress st., Conn. river to Garden brook in Ferry st.	1,081	3′-4″x5′-0″	Brick	10,086.73	
†Connecticut river to Fulton st.	385	4′-10″x7′-3″	Con.	3,919.09	
†Fulton to Main st.	691	4′- 2″x6′-3″	Con.	6,470.80	
					20,476.62
Dale st., northerly from sewer 60 ft. south of Hubbard ave.	203	10″	Clay	222.58	
Winthrop st., southerly	46	8″	Clay	13.08	
Winthrop st., northerly	123	10″	Clay	259.62	
William st., northerly	143	10″	Clay	288.91	
					784.19
Dartmouth st., St. James ave. to Yale st.	973	3′-0″x4′-6″	Brick		
Yale to Bowles st.	295	2′-6″x3′-9″	Brick		8,247.06
Dartmouth terrace, Worthington to Cornell st.	499	20′	Clay		
	357	18″	Clay		2,213.06
	177	15″	Clay		
Davis court, Bridge st. to Harrison ave.	450	12″	Clay		500.67
Daviston st., Allen to West Alvord st.	403	10″	Clay		
West Alvord to East Alvord st.	491	10″	Clay	2,035.17	
East Alvord st., southeasterly	299	10″	Clay		
Sumner ave., northerly	417	18″	Clay		
	104	15″	Clay		
	193	12″	Clay	1,388.51	
	220	10″	Clay		3,423.68

*Surface drainage only. † Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Dawes st., Bay st., southerly	299	15″	Clay		
	310	12″	Clay	$207.36	
	518	10″	Clay		
**Andrew to Bay st	452	20″	Clay		
	254	18″	Clay		
	304	15″	Clay	5,578.51	
	292	12″	Clay		$5,785.87
Dawson ave., White street, westerly	350	10″	Clay		118.35
Daytona st., Belmont to Sumner ave	524	12″	Clay		500.44
Demond ave., Fisk ave., westerly	510	12″	Clay		
Plainfield st., easterly	403	12″	Clay		642.06
Denton circle, Liberty st., easterly	406	12″	Clay		552.88
Dexter st., Knox to Pine st.	300	15″	Clay		
	282	12″	Clay	686.15	
	202	10″	Clay	219.08	
					905.23
Dickinson st., Mill st. to Sumner ave	35	4′-6″ cir.	Brick		
	60	2′-1″x5′-0″	Con.		
	251	5′-0″ cir.	Brick		
	679	4′-0″ cir.	Brick	44,606.56	
	*460	4′-10″x7′-3″	Brick		
	*869	4′-8″x7′-0″	Brick		
	*1,040	4′-4″x6′-6″	Brick		
	*996	4′-2″x6′-3″	Brick		
Sumner ave., southerly	1,379	2′-6″x3′-9″	Brick		
	324	2′-4″x3′-6″	Brick		
	434	2′-0″x3′-0″	Brick	8,806.81	
	312	1′-10″x2′-9″	Brick		
Groveland st., southerly	202	18″	Clay		
	341	15″	Clay	2,510.97	
					55,924.34
Division st., Plainfield st., westerly	300	18″	Clay		
	360	15″	Clay		1,001.34
Donald st., Birnie ave., easterly	315	10″	Clay		406.60
Dorchester st., St. James ave. to Amherst st	364	12″	Clay		
	238	10″	Clay		417.70
Dorne st., Smith st., northerly	219	12″	Clay		182.12
Douglas st., B. & M. R. R. to North Main st. (see Rowland ave.)	....	....	....		....

*Elliptical. ** Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Dover st., North Main to Chestnut st	424	4′-6″ cir.	Brick		$4,890.56
	442	4′-0″ cir.	Brick		
Dresden st., State st., southerly	359	12″	Clay		25.14
	321	10″	Clay		
Drexel st., Chicopee road, northerly	253	20″	Clay		6,406.39
	261	18″	Clay		
	323	15″	Clay		
	106	12″	Clay		
Duke st., I.O., Oak st. to Pasco road	287	3′-0″ cir.	Con.		2,828.98
Dunmoreland st., Wilbraham road, southerly	301	15″	Clay	$1,113.42	
	302	12″	Clay		
	350	10″	Clay		
*Westford circle, northerly	584	10″	Clay	681.23	
*Westford circle to King st	546	10″	Clay	510.37	
†Westford circle, southerly	276	10″	Clay	672.35	
					2,977.37
***Duryea st.**, Page boulevard to Eureka st	1,068	10″	Clay		1,029.27
Dwight road, White to Leslie st	346	18″	Clay	2,075.78	
	348	15″	Clay		
Leslie st., southerly	250	12″	Clay	712.18	
					2,787.96
Dwight st., Sanford to State st	258	2′-8″x4′-0″	Brick	1,571.86	
Sanford st. to Harrison ave.	253	20″	Clay	1,441.27	
	229	18″	Clay		
	199	15″	Clay		
Harrison ave., northerly	129	12″	Clay	319.96	
Hillman st., southerly	226	10″	Clay	289.25	
Hillman st., northerly	103	10″	Clay	420.28	
Worthington st., southerly	269	12″	Clay	433.91	
Worthington st., northerly	342	12″	Cem.	374.73	
					4,851.26
Dwight st. extension, Saratoga st., southerly	249	12″	Clay		349.37
Dwight st. underpass, Liberty st., southerly	390	12″	Clay		....
Dymon st., Walnut st., easterly	415	12″	Cem.		385.92
Eagle st., North Main to Chestnut st	643	15″	Clay		....
Earl st., Bloomfield st., northerly	190	10″	Clay		157.32

*Sanitary sewer. †Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
East Alvord st., West Alvord st. to Daviston avenue	495	18″	Clay		$1,199.51
	598	12″	Clay		
	86	10″	Clay		
East Court st., Dwight st., westerly	206	12″	Clay		303.10
	62	10″	Clay		
East Hooker st., North Main to North st.	444	10″	Cem.	$110.26	
	255	10″	Clay	....	
					110.26
Eastern ave., Watershops pond to Manhattan st.	1,164	24″	Clay	2,164.43	
Manhattan to Alden st.	338	20″	Clay	636.21	
Alden to Collins st.	231	12″	Clay	313.99	
Greene st., southerly	125	8″	Clay	69.58	
Greene to Ladd st.	38	15″	Clay	67.21	
Olive st., southerly	169	8″	Clay	167.87	
Lebanon to Olive st.	159	12″	Cem.	190.96	
Lebanon to King st.	194	12″	Cem.	351.89	
	55	12″	Clay	95.43	
King to Chapel st.	152	10″	Cem.	166.50	
	101	10″	Clay	149.70	
Pendleton ave., northerly.	312	12″	Cem.	256.78	
Tyler st., northerly	286	12″	Cem.	181.30	
Quincy st., northerly	118	10″	Cem.	131.15	
Monroe st., southerly	28	12″	Cem.	45.09	
	210	8″	Clay	179.00	
Monroe st., northerly	29	12″	Cem.	51.50	
	123	8″	Clay	84.98	
Wilbraham rd., southerly	296	12″	Clay	1,250.01	
					6,553.58
Eddy st., Chicopee road, northerly	532	20″	Clay		6,126.65
	229	18″	Clay		
	278	15″	Clay		
	170	12″	Clay		
Eddywood ave., Sumner ave., northerly	328	10″	Clay		436.66
***Edendale st.**, Page blvd. to Bowles park	1,471	10″	Clay		1,299.39
Edgeland st., Coomes st. to near Fort Pleasant ave.	512	10″	Clay	2,576.63	
Longhill st., easterly	229	18″	Clay	1,219.53	
					3,796.16
Edgemont st., State st., northerly	499	10″	Clay		554.05
	296	8″	Clay		
***Edgewood st.**, Acorn to Bay st.	1,001	8″	Clay	443.73	

* Sanitary sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
*Acorn to Bay st.	350	18″	Clay		
	349	15″	Clay	$2,458.26	
	377	12″	Clay		
					$2,901.99
Edwards st., Chestnut st., easterly	551	12″	Cem.		495.36
Eldert st., Edgemont st., easterly	277	12″	Clay		1,079.69
Eldredge st., Belmont ave. to Washington st.	531	10″	Clay		750.09
Eleanor road, White st., southerly	277	15″	Clay		854.78
	430	12″	Clay		
Elliot st., Salem st., southerly	610	15″	Cem.	730.48	
	243	12″	Cem.	341.99	
					1,072.47
Elm st., submerged outlet	191	24″	Wood	1,700.79	
	26	24″	C. Iron	359.80	
Conn. river to Water st.	385	3′-9″ cir.	Brick	10,759.40	
Water to Main st.	996	3′-8″x5′-6″	Brick		
					12,819.99
Elmwood st., Main to Hanover st.	300	18″	Clay		
	249	15″	Clay		1,058.02
	299	12″	Clay		
Eloise st., Sumner ave., southerly	331	10″	Clay		1,116.58
El Paso place, St. James blvd., southerly	282	10″	Clay		929.05
Emery st., Boylston st., east and west	542	12″	Cem.		653.92
Essex street, Garden brook, westerly	418	15″	Cem.	355.00	
Garden brook to Chestnut st.	1,115	2′-2″x3′-3″	Brick	7,140.62	
	204	18″	Cem.	434.71	
					7,930.33
Essex st., I. O., Oak to Myrtle st.	254	12″	Clay		
Oak st., easterly	426	10″	Clay	741.76	
	183	10″	Clay	248.23	
					989.99
Eton st., Sumner ave. to Morningside park	502	12″	Clay		698.40
	272	10″	Clay		
Euclid ave., Belmont ave. to Dickinson st.	389	12″	Clay		
	741	10″	Clay	1,203.46	
	77	8″	Clay	50.67	
†Dickinson st., westerly	350	15″	Clay		
	350	12″	Clay	773.10	

*Storm water sewer. † Surface drainage only.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Dickinson st., easterly...	275	10″	Clay	$332.10	
Orange st., southerly....	257	18″	Clay	871.20	
	172	10″	Clay		
Orange st., northerly....	30	12″	Clay	23.07	
					$3,253.60
Everett st., Chestnut st. to brook.....	323	15″	Cem.	320.58	
brook to Cass st.....	926	15″	Clay	821.43	
Cass st., easterly.....	313	15″	Clay	646.97	
					1,788.98
Fairbanks place, Worthington st., northerly.	249	10″	Clay		420.97
Fairfield st., Litchfield to Garfield st.....	376	12″	Clay	....	
	556	10″	Clay	351.64	
					351.64
Fairmount st., Commonwealth ave. to Lawndale st.....	350	10″	Clay		173.17
Falmouth st., I. O., Parker st., westerly.....	204	18″	Clay		275.44
Farnsworth st., Hamburg	530	20″	Clay	1,653.14	
st. to Connecticut ave..	279	18″	Clay		
	341	12″	Clay	1,011.82	
	264	10″	Clay		
					2,664.96
Federal st., Worthington to Pearl st.....	567	12″	Cem.	740.92	
Summer st., southerly....	274	10″	Clay	172.00	
					912.92
Ferry st., Main to Garden brook (see Cypress st.).	....	....	....	....	
Garden brook to Chestnut st.....	1,168	2′-4″x3′-6″	Brick	5,417.12	
Main st., easterly.....	*394	4′-2″x6′-3″	Con.	11,067.29	
	1,004	4′-9″ cir.	Con.		
					16,484.41
Firglade ave., Sumner to	231	15″	Clay		
Pineywoods ave.....	216	12″	Clay	3,205.32	
	620	10″	Clay		
Pineywoods ave. to Washington boulevard.....	242	12″	Clay	431.88	
	176	10″	Clay		
					3,637.20
Fisk ave., Rowland to Worcester ave.....	272	24″	Clay		
	275	20″	Clay	1,073.11	
	298	10″	Clay		

* Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Wason ave., southerly...	299	24″	Clay		
	294	20″	Clay	$1,216.81	
	248	12″	Clay		
					$2,289.92
Florence st., Pine to Hancock st.....	282	20″	Clay		
	542	18″	Clay	9,491.63	
	319	15″	Clay		
	398	12″	Clay		
Hancock st., easterly....	253	10″	Cem.	323.93	
	26	10″	Clay	31.11	
					9,846.67
Florentine gardens, Pineywoods ave., northerly..	421	10″	Clay		81.89
Florida st., Worthington st.	555	15″	Clay	978.89	
to Ingersoll Grove....	279	12″	Clay		
Worthington st. to St. James ave.....	935	2′-2″x3′-3″	Brick	4,499.10	
St. James ave. to Bay st.	599	24″	Clay	1,832.21	
					7,310.20
Forest st., Belmont to Forest Park ave.....	419	12″	Clay		806.38
	255	10″	Clay		
Forest Park ave., Fort Pleasant ave. to Garfield st.....	1,081	20″	Clay	....	
	325	20″	Clay	1,217.48	
	562	18″	Clay		
Sumner ave., northerly...	567	12″	Clay	177.07	
Sumner ave., southerly...	66	10″	Clay	....	
	438	10″	Clay	379.92	
Pineywoods ave., northerly.....	380	10″	Clay	60.18	
					1,834.65
Fort st., Main to Water st..	633	12″	Cem.		633.43
Fort Pleasant ave., Mill	888	2′-4″x3′-6″	Brick	13,339.80	
river to Sumner ave....	1,825	2′-0″x3′-0″	Brick		
Mill st., southerly.....	428	12″	Clay	293.42	
					13,633.22
Foster st., Knox st., easterly.....	511	12″	Clay	517.25	
	224	12″	Cem.	34.68	
					551.93
Fountain place, Belmont ave. to Belvidere st....	719	12″	Clay	1,386.10	
Belvidere to Sylvan st...	269	12″	Clay	771.07	
Sylvan to Woodlawn st..	299	10″	Clay	525.63	
					2,682.80
Franklin st., Garden brook sewer to Main st.....	434	18″	Cem.	593.13	
Garden brook sewer to Chestnut st.....	919	2′-2″x3′-3″	Con.	4,106.84	
	295	20″	Clay	804.75	

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Chestnut to Charles st....	273	15″	Clay	$384.87	
Charles to Cass st.....	827	12″	Clay	1,168.25	
	276	10″	Clay		
Cass st. to Murray Hill ave.....	621	12″	Clay	1,051.76	
	330	10″	Clay		
Nursery st., westerly....	207	15″	Clay	....	
Nursery to Genesee st....	107	15″	Clay	199.93	
	557	15″	Cem.	....	
	27	12″	Clay	57.66	
					$8,367.19
Freeman terrace, Stockman to Phœnix st.....	252	18″	Clay		870.04
	270	15″	Clay		
Fremont st., Main to Water st.....	780	1′-6″x1′-7″	Brick	702.45	
Main st., westerly.....	656	12″	Cem.	692.92	
	30	12″	Clay	65.21	
					1,460.58
Fresno st., Page boulevard, easterly.....	935	10″	Clay		4,205.84
Fulton st., Cypress to Clinton st.....	944	12″	Cem.	924.38	
*Clinton to Sargeant st. (cost shown under Clinton st.).....	1,080	4′-8″x7′-0″	Brick	....	
	42	4′-10″x7′-3″	Brick	....	
Sargeant to John st.....	254	18″	Clay	1,700.43	
	301	15″	Cem.	660.22	
John st., northerly.....	314	12″	Clay	674.48	
	408	10″	Clay		
					3,959.51
Garden brook sewer (see private ways).					
Gardner ave., Gardner st., northerly.....	151	8″	Clay		73.11
Gardner st., Hanover to Water st.....	655	2′-0″x3′-0″	Brick	1,995.23	
Water to Main st.....	226	12″	Clay	504.81	
	199	10″	Clay		
					2,500.04
Garfield st., Forest Park ave., easterly.....	556	15″	Clay	1,073.96	
	514	12″	Clay		
Belmont ave., westerly...	531	10″	Clay	450.79	
					1,524.75
Genesee st., Franklin st., southerly.....	200	10″	Clay	281.49	
Armory to Liberty st....	350	12″	Clay	645.23	
	351	10″	Clay		
					926.72
George st., Dexter st., southerly.....	409	10″	Clay		473.60

* Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Girard ave., Bay to McKnight st.	944	12″	Clay		$863.45
Glendell terrace, Euclid ave., easterly — north side	101	12″	Clay	$569.36	
	175	10″	Clay		
Euclid ave., easterly — south side	268	10″	Clay	496.36	
					1,065.72
Glenwood st., Commonwealth ave. to Lawndale st.	228	12″	Clay		473.76
Gold st., Armory to Hamburg st	251	12″	Clay		
	598	10″	Clay		2,236.93
Goodrich st., Liberty st., northerly	240	10″	Clay		460.87
Gordon st., Pasadena ave. to White st.	618	15″	Clay		627.46
Governor st., Armory st. to Penacook ave.	424	20″	Clay		
	401	18″	Clay		
	402	15″	Clay		1,276.19
	224	12″	Clay		
Grace st., Birnie ave. to North Main st.	274	10″	Clay		1,137.09
Grand st., Revere st., easterly	250	18″	Clay	2,452.01	
	252	15″	Clay		
Revere st., westerly	151	10″	Clay	30.85	
					2,482.86
Grant st., Magazine to Armory st.	588	12″	Cem.		477.26
Granville st., Eastern ave. to Logan st.	248	12″	Clay		644.77
	247	10″	Clay		
Gray's ave., Cypress st., northerly	495	12″	Cem.		460.92
Greenacre sq. (north), Foster st., easterly	201	10″	Clay		173.46
Greenacre sq. (south), Foster st., easterly	346	10″	Clay		316.93
Greenbrier st., Larkspur to Trillium st.	300	10″	Clay		322.19
Blaine to Trillium st.	270	10″	Clay		
Greene st., Hancock st. to Eastern ave.	610	18″	Cem.		1,897.68
	793	15″	Cem.		
Green lane, Rimmon ave., westerly and northerly.	744	12″	Clay	....	
	143	10″	Clay	....	
					....

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Greenleaf st., Sumner ave. to Garfield st.	527	12″	Clay		$178.85
Greenwich st., Birnie ave., easterly	300	12″	Clay		467.79
	300	10″	Clay		
Greenwood st., Garden brook to Main st.	250	15″	Clay	$645.46	
	136	12″	Clay		
Garden brook, easterly	538	15″	Clay		
	448	12″	Clay	1,639.27	
	117	10″	Clay		
					2,284.73
Grenada terrace, Dickinson to Ventura st.	220	18″	Clay	828.48	
	310	15″	Clay		
Ventura st., easterly	309	12″	Clay	445.27	
	216	10″	Clay		
					1,273.75
Griffin st., Eddy to Lawrence st.	252	12″	Clay		798.73
Grosvenor st., North to Chestnut st.	131	18″	Cem.		721.17
	648	15″	Cem.		
Grove st., North Main st., easterly	409	10″	Clay		442.65
North st., westerly	270	10″	Clay		
Groveland ave., Dickinson st. to town line	533	12″	Clay		525.19
	117	10″	Clay		
Grover st., Armory to Liberty st.	300	18″	Clay		
	303	15″	Clay		910.58
	298	12″	Clay		
	432	10″	Clay		
***Gunn sq.**, Westford ave., westerly	290	10″	Clay		343.09
Hall st., Belmont ave. to Dickinson st.	500	12″	Clay	904.55	
	474	10″	Clay		
†Dickinson st., southerly	774	12″	Clay	698.29	
					1,602.84
Hamburg st., Springfield st., easterly	367	20″	Clay		1,067.20
	235	10″	Clay		
Hampden st., Water to Main st.	569	15″	Cem.		762.57
Hampden st., I. O., Chestnut st., easterly	285	12″	Cem.	187.28	
	174	12″	Clay	299.12	
Holly st., easterly	150	10″	Clay	165.26	
Pine st., westerly	200	12″	Clay	370.33	
	199	10″	Clay		
					1,021.99

*Sanitary sewer. †Surface drainage only.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Hampshire st., I. O., Oak st., westerly	300	12″	Clay	$633.59	
	398	10″	Clay		
Oak st., easterly	250	12″	Cem.	206.20	
Pine st., westerly	469	10″	Clay	539.21	
Myrtle st., westerly	300	10″	Clay	295.05	
					$1,674.05
Hancock st., Mill river to Central st.	920	12″	Clay	995.01	
Central to Walnut st.	218	18″	Cem.	1,874.54	
	1,343	15″	Cem.		
Walnut to Alden st.	122	12″	Cem.	88.00	
Lebanon to Alden st.	827	2′-0″x3′-0″	Brick	5,009.61	
Walnut (through Lebanon) to Quincy st.	1,852	3′-6″x5′-3″	Brick	21,668.02	
Quincy to State st.	913	3′-4″x5′-0″	Brick		
					29,635.18
Hanover st., York to Gardner st.	830	2′-2″x3′-3″	Brick		2,650.26
Harriet st., North Main to North st.	250	15″	Clay	377.17	
	207	12″	Clay		
North st., easterly	330	10″	Clay	200.13	
					577.30
Harrison ave., Main to Chestnut st.	600	15″	Cem.	874.11	
	250	8″	Clay	203.61	
					1,077.72
Harvard st., Yale st. to St. James ave.	316	18″	Clay	998.99	
	300	15″	Clay		
	291	12″	Cem.	266.84	
St. James ave. to Cornell st.	736	12″	Cem.	122.29	
					1,388.12
Hastings st., Kendall ave., easterly	250	15″	Clay	734.61	
	250	12″	Clay		
	201	10″	Clay		
Freeman terrace, easterly	250	12″	Clay	651.30	
	254	10″	Clay		
					1,385.91
Hawley st., State st., southerly	110	12″	Cem.		
Monroe st., northerly	71	12″	Cem.		300.34
	330	10″	Clay		
Hawthorne st., Hancock to Spruce st.	492	12″	Clay		1,520.13
Hayden ave., State st., northerly	335	12″	Clay		308.14
	557	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Healey ave., I. O., Worcester to South st.	989	15″	Clay	$1,876.01	
South st., southerly	350	12″	Clay	575.54	
	84	10″	Clay		
					$2,451.55
Hebron st., North to Chestnut st.	663	12″	Clay		519.82
Herman st., Sumner ave. to Vermont st.	257	12″	Clay		
	286	10″	Clay		658.81
Hiawatha st., White st., westerly	383	10″	Clay		347.99
Hickory st., Hancock st., easterly	200	12″	Clay	868.40	
	252	10″	Clay		
Mill river intercepting sewer to Alden st.	754	20″	Clay		
	228	18″	Clay	2,557.29	
	184	15″	Clay		
	788	12″	Clay		
					3,425.69
High st., Maple st. to Ingraham ave.	523	18″	Clay		
	567	15″	Clay	1,958.92	
	550	12″	Clay		
Ingraham ave., easterly	846	12″	Clay	987.71	
					2,946.63
Hillman st., Main to Dwight st.	350	15″	Clay		1,436.30
	380	12″	Clay		
Hillside place, Richelieu court, easterly	106	8″	Clay		....
Holland st., North Main st., easterly	225	12″	Clay		425.75
	50	10″	Clay		
Holly st., I. O., Worcester to Hampden st.	377	15″	Clay	419.11	
Hampden st., southerly	175	12″	Clay	117.69	
					536.80
Hollywood st., Commonwealth ave., easterly	211	12″	Clay	508.61	
	241	10″	Clay		
Dickinson st., easterly	174	10″	Clay	171.67	
					680.28
Holyoke st., Main st., westerly	734	12″	Cem.		1,104.47
Home st., Liberty st., westerly	424	10″	Clay	322.65	
Penacook ave., easterly	246	10″	Clay	246.22	
					568.87
Homer st., State st., southerly	31	12″	Clay		186.81
	464	10″	Clay		
Horace st., Dickinson st., northerly	363	12″	Clay		861.90
	411	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Howard st., Main st., westerly	344	15″	Clay	$837.22	
	321	12″	Clay		
Water st., easterly	276	12″	Cem.	255.78	
	30	12″	Clay	43.40	
Water st., westerly	314	12″	Cem.	326.98	
	31	12″	Clay	90.75	
					$1,554.13
Hubbard ave., Main st., easterly	257	15″	Clay		630.47
	321	12″	Clay		
Hughes st., Sylvan ave., westerly	252	10″	Clay		233.16
Hunt terrace, Allen st., northerly	304	10″	Clay		....
Hunter place, State st., northerly	350	12″	Clay		602.72
	313	10″	Clay		
Huntington st., Birnie ave., easterly	300	12″	Clay		441.98
	300	10″	Clay		
Hyde ave., Fisk ave. to Plainfield st.	301	15″	Clay		712.99
	300	12″	Clay		
	219	10″	Clay		
Ingersoll grove, Worthington st., northerly	782	12″	Cem.	1,038.85	
	218	8″	Clay		
Florida st., easterly	146	10″	Clay	90.97	
Bowdoin st., easterly	132	10″	Clay	106.53	
					1,236.35
Ionia st., State st., northerly	720	10″	Clay		445.92
Irvington st., Sumner ave. to Morningside Park	300	12″	Clay		201.07
	400	10″	Clay		
Itendale st., Belmont ave. to Washington st.	277	20″	Clay		1,657.39
	455	18″	Clay		
James st., Cedar st., northerly	289	15″	Cem.		1,129.63
	534	12″	Cem.		
Jefferson ave., North Main to Chestnut st.	299	20″	Clay		
See private ways also.	299	18″	Clay		
	276	15″	Clay	1,755.12	
	60	12″	Clay		
	414	12″	Cem.	531.66	
	78	6″	Clay	37.89	
					2,324.67
Jenks st., North Main to Chestnut st.	404	12″	Clay		922.48

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
John st., Fulton to Plainfield st.	652	12″	Cem.		$420.18
Johnson st., Dickinson st. to Pasadena ave.	1,964	18″	Clay		3,756.87
Johnson st., I. O., Main to South st.	500	20″	Clay		1,254.26
	463	18″	Clay		
Joseph st. (see Alberta st.)					
Keith st., Belmont ave. to Dickinson st.	551	12″	Clay	$1,106.40	
	551	10″	Clay		
*Dickinson st., southerly.	350	15″	Clay		
	301	12″	Clay	823.06	
	186	10″	Clay		
Kendall st., Liberty st. to Sherman ave.					1,929.46
	907	18″	Clay		2,462.18
Kensington ave., Oakland to Earl st.	451	18″	Clay		
	402	15″	Clay		
Earl st. to Pasadena ave.	567	12″	Clay		2,324.76
	260	10″	Clay		
Kenwood park, Belmont ave., northerly	415	12″	Clay		1,855.42
	842	10″	Clay		
Kenwood terrace, Belmont to Sumner ave.	218	12″	Clay		463.91
	328	10″	Clay		
Kenyon st., Oak Grove ave. to Acorn st.	706	27″	Clay		9,298.03
	371	24″	Clay		
Kibbe ave., Summer to Worthington st.	260	18″	Clay		552.92
Kibbe Hollow, northerly of Worthington st.	447	24″	Clay	....	
Southerly of Worthington st.	144	15″	Clay	324.32	324.32
Kimberly ave., White st., northerly	250	12″	Clay		
	282	10″	Clay		
Rupert to Mansfield st.	719	10″	Clay		2,337.29
Mansfield to Allen st.	272	10″	Clay		
King st., Walnut to Hancock st.	504	15″	Cem.	1,191.24	
	441	12″	Cem.		
Hancock to Logan st.	311	20″	Clay		
	399	18″	Clay	2,650.91	
	686	15″	Clay		
	238	12″	Clay	701.29	
	239	10″	Clay		
†Westford to Wilbraham ave.	427	10″	Clay	321.81	
†Westford ave., easterly	225	10″	Clay	197.13	
**Massachusetts av. to Dunmoreland st.	248	10″	Clay	278.75	

* Surface drainage only † Sanitary sewer. ** Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
*Massachusetts to Westford ave.	243	12″	Clay	$511.85	
	84	10″	Clay		
*Northampton to Wilbraham ave.	221	20″	Clay	922.15	
					$6,775.13
Knox st., Mill river to Windsor st.	1,303	24″	Clay		3,132.56
Ladd st., Eastern ave. to Logan st.	243	15″	Clay		479.68
	304	12″	Clay		
Lafayette st., St. James ave. to Amherst st.	582	12″	Clay		614.58
	21	10″	Clay		
Langdon st., Penacook ave., easterly.	504	12″	Clay		679.73
	326	10″	Clay		
Larkspur st., White st., easterly.	299	15″	Clay		500.85
	304	12″	Clay		
	101	10″	Clay		
Laurel st., Conn. river to Plainfield st.	534	18″	Cem.	1,548.19	
	405	18″	Clay	1,358.28	
	20	18″	Clay	44.62	
					2,951.09
Lawrence st., Griffin st., northerly.	249	12″	Clay		867.40
	228	10″	Clay		
Laverne ave., Bellevue ave. to Marengo park.	211	10″	Clay		....
Lawndale st., Belmont ave. to Glenwood st.	300	12″	Clay		614.64
	302	10″	Clay		
Lebanon st. (see Hancock)	....	3′-6″x5′-3″	Brick	....	
Hancock st., westerly.	158	2′-0″x3′-0″	Brick	1,495.77	
Hancock to Eastern ave.	261	18″	Cem.		
	255	20″	Clay		
	628	18″	Clay	9,247.94	
	278	15″	Clay		
					10,743.71
Ledyard st., Armory st., northwesterly.	478	10″	Clay		321.39
Leete st., Longhill st., easterly.	431	18″	Clay		1,570.13
	270	15″	Clay		
	150	10″	Clay		
Lenox st., Sumner ave., southerly.	465	10″	Clay		103.74
Leonard st., Franklin st., northerly.	367	12″	Clay		832.48
	52	10″	Clay		
Leslie terrace, Liberty st., northerly.	151	12″	Clay		236.20
Lester st., Sumner ave. to Vermont st.	286	12″	Clay		343.74
	279	10″	Clay		

* Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Lexington ave., Chestnut to Massasoit st.	668	12″	Clay	$546.52	
*Massasoit st., easterly	437	2′-0″x3′-0″	Con.	1,996.91	
					$2,543.43
Leyfred terrace, Belmont ave., northerly	300	18″	Clay		1,041.08
	317	15″	Clay		
Liberty st., Garden brook to Main st.	118	12″	Clay	179.19	
Garden brook to Chestnut st	70	1′-6″x1′-7″	Brick		
	172	12″	Cem.		
	644	20″	Clay	2,902.14	
	325	15″	Clay		
	184	12″	Clay		
Chestnut to Webster st.	784	2′- 4″x3′-6″	Brick		
	659	1′-10″x2′-9″	Brick	9,123.49	
	684	2′- 2″x3′-3″	Brick		
Webster to Armory st.	366	3′- 0″x4′-6″	Brick	5,383.15	
	1,282	2′- 2″x3′-3″	Brick		
	317	1′-10″x2′-9″	Brick	2,566.69	
	449	2′- 2″x3′-3″	Brick		
Armory to Roy st.	1,194	24″	Clay		
	1,103	18″	Clay	6,715.67	
	1,447	15″	Clay		
					26,870.33
Lillian st., Oak st., easterly	297	12″	Clay		232.47
Lincoln st., Magazine to Federal st.	823	12″	Clay	1,017.59	
Magazine st., easterly	186	12″	Clay	1,030.32	
					2,047.91
Linden st., Chestnut to Cass st.	470	18″	Cem.		1,475.53
	862	15″	Cem.		
Litchfield st., Belmont ave. to Fairfield st.	159	15″	Clay	335.11	
Garfield st., northerly	69	6″	Clay	7.10	
					342.21
Locust st., York to Mill st.	84	3′-0″x4′- 6″	Brick		
	364	2′-9″x4′-1½″	Brick	6,804.18	
	686	2′-6″x3′- 9″	Brick		
Dickinson st., westerly	197	20″	Clay	617.01	
					7,421.19
Logan st., Collins st., southerly	97	10″	Clay	133.56	
Collins to Ladd st.	183	10″	Clay	188.75	
Ladd st., northerly	88	10″	Clay	67.64	
Granville st., northerly	200	10″	Clay	169.04	
					558.99

* Egg shape.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Lombard st., Water st., easterly	500	12″	Cem.		$382.41
Longfellow terrace, White	246	12″	Clay	$476.27	
st., westerly	200	10″	Clay		
southerly towards Belmont ave.	229	10″	Clay	246.97	
					723.24
Longhill st., submerged	26	18″	Clay		
outlet	290	18″	W'd	5,387.70	
	28	18″	C-ir.		
Conn. river to Washington boulevard	1,373	24″	Clay	2,086.09	
(See Washington boulevard)	283	2′-4″x3′-6″	Brick	1,989.47	
Washington ave., northerly	399	15″	Clay		
	512	12″	Clay	1,027.66	
	160	10″	Clay		
Sumner ave., southerly	356	8″	Clay	386.61	
Main st. to Sumner ave.	90	2′-0″x3′-0″	Con.	514 35	
	136	24″	Clay		
	265	18″	Clay		
	350	15″	Clay	4,570.67	
	400	12″	Clay		
	777	10″	Clay		
					15,962.55
Longview st., Leete st., southerly	265	12″	Clay	506.49	
	248	10″	Clay	1,163.38	
					1,669.87
Loring st., Water st., easterly	607	12″	Cem.	733.41	
	40	12″	Clay	48.34	
					781.75
Los Angeles st., Milford to	352	12″	Clay		2,308.35
Hamburg st	285	10″	Clay		
Lowell st., Conn. river to	305	18″	Clay		
Plainfield st	396	15″	Clay		1,063.24
	466	12″	Clay		
	283	10″	Clay		
Lowell st. pumping station	...	....	...		2,991.84
Lyman st., Main to Chestnut st	1,335	2′-0″x3′-0″	Brick	6,113.12	
Chestnut to Spring st.	418	15″	Clay	1,793.76	
	302	15″	Cem.	695.83	
					8,602.71
Lyndale st., Belmont ave.,	350	15″	Clay		
northerly	300	12″	Clay		952.60
	324	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Lyons st., I. O., Main st., northerly	261	18″	Clay	$389.58	
Worcester to South st.	768	10″	Clay	1,821.39	
					$2,210.97
Madison ave., Central st., northerly	250	12″	Clay		737.57
	287	10″	Clay		
Magazine st., Worthington to Lincoln st.	682	18″	Cem.		1,267.96
	249	15″	Cem.		
Magnolia terrace, east side, Sumner to Spruceland ave.	620	10″	Clay	1,233.46	
west side, Sumner to Spruceland ave.	621	10″	Clay		
overflow connection between east and west side	62	8″	Clay	26.00	
Washington to Spruceland ave.	362	24″	Clay	2,921.38	
	268	15″	Clay		
	334	12″	Clay		4,180.84
Main st., Pecousic ave. to Longhill st.	191	2′-4″x3′-6″	Con.	1,197.42	
Mill river to Mill st.	258	10″	Clay	342.25	
Locust to Mill st.	385	15″	Clay	1,926.01	
	394	12″	Clay		
Mill st., southerly	55	15″	Cem.	96.72	
York st. to B. & A. R. R.	56	7′-0″ cir.	Brick	20,812.99	
	1,772	6′-6″ cir.	Brick		
	906	5′-6″ cir.	Brick		
	990	5′-0″ cir.	Brick		
	1,624	3′-4″x5′-0″	Brick	34,453.56	
	864	2′-4″x3′-6″	Brick		
	264	12″	Clay	546.56	
Cypress to Emery st.	298	15″	Clay	1,210.56	
	270	12″	Clay		
Emery st., southerly	278	12″	Cem.	389.20	
Emery to Sargeant st.	341	24″	Clay	2,840.72	
	442	20″	Clay		
	480	18″	Clay		
	186	15″	Clay		
					63,815.99
Main st., I. O., Chicopee river to Pine st.	2,321	2′-4″x3′-6″	Brick	7,654.03	
Pine to Cedar st.	500	18″	Cem.	896.63	
	185	15″	Cem.		
	103	12″	Clay	128.49	
Cedar to Lyons st.	1,110	2′-0″x3′-0″	Brick	5,068.28	
Chicopee river through private land and Main st. to Beaudry st.	699	18″	Clay	1,530.17	
	232	15″	Clay		
	212	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Parker st., westerly.....	473	12″	Clay	$517.35	
Lyons st., easterly.....	205	24″	Clay		
	245	18″	Clay	1,439.14	
	129	12″	Clay		
					$17,234.09
Malden st., Allen st., southerly.....	542	15″	Clay		
	291	12″	Clay		204.59
	581	10″	Clay		
Manchester terrace, White st., southerly.....	550	15″	Clay		
	342	12″	Clay		2,222.73
Manhattan st., Eastern ave. to Walnut st.....	290	15″	Clay		
	645	12″	Clay		862.70
	205	10″	Clay		
Manitoba st., White to Blaine st.....	247	15″	Clay		
	256	12″	Clay		1,037.77
	273	10″	Clay		
Mansfield st., White st. to Kimberly ave.....	351	18″	Clay		
	251	15″	Clay		1,814.89
	341	12″	Clay		
Maple st., State to Temple st.....	315	18″	Clay	727.06	
Park to High st.....	225	18″	Clay	505.21	
Union st., southerly.....	515	18″	Cem.		
	135	12″	Cem.	959.13	
Central st. to Avon place.	192	24″	Clay	1,417.41	
Central st., southerly....	33	18″	Cem.		
	388	12″	Cem.	160.95	
	784	12″	Clay	1,289.58	
Pine st., northerly.....	195	15″	Cem.		
	522	12″	Cem.	1,093.44	
					6,152.78
Mapledell st., State to Burr st.....	337	15″	Clay		
	300	12″	Clay	133.34	
	388	10″	Clay		
*Burr st., southerly.....	386	12″	Clay		
	275	10″	Clay	1,713.78	
					1,847.12
Maplewood terrace, Fort Pleasant to Forest Park ave.....	226	20″	Clay		
	329	18″	Clay		4,083.85
	671	15″	Clay		
Marble st., Main st., easterly.....	222	18″	Cem.		
	586	15″	Cem.		1,248.12
	242	12″	Cem.		

*Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Marengo park, Belmont ave., easterly	443	15″	Clay		
	612	12″	Clay		$252.06
	778	10″	Clay		
Margaret st., Water st., westerly	520	12″	Cem.	$540.89	
Water st., easterly	825	12″	Cem.	855.32	
	30	12″	Clay	31.41	
					1,427.62
Marion st., Bay st., southerly	833	12″	Clay	944.01	
Chapin st., easterly	94	10″	Clay	25.89	
	319	8″	Clay		
					969.90
Market st., State st., northerly	119	10″	Clay	....	
Sanford st., southerly	200	12″	Clay	437.55	
Sanford st. to Harrison ave.	301	15″	Clay	1,197.72	
	350	12″	Clay		
Harrison ave., southerly	154	12″	Cem.	....	
					1,635.27
Marlboro ave., State st. to Wilbraham road	300	12″	Clay		555.21
	449	10″	Clay		
Marlborough st., Bristol st., easterly	160	10″	Clay	101.12	
Middlesex to Suffolk st.	172	10″	Clay	177.34	
*Carlisle Valley sewer to Wellington st	1,409	10″	Clay	9,254.47	
					9,532.93
Marshall place (see Melrose st.).					
Maryland st., Dickinson st, westerly	300	15″	Clay		1,543.30
	177	12″	Clay		
Mason place, Dickinson st., southerly	200	12″	Clay		433.02
	276	10″	Clay		
Mason st., State to Pease st.	349	15″	Clay		746.99
	359	12″	Clay		
Massachusetts ave., Wilbraham road, southerly	300	15″	Clay		
	300	12″	Clay	1,056.92	
	227	10″	Clay		
Westford circle, northerly	218	12″	Clay		
	489	10″	Clay	47.67	
*Westford circle, southerly	603	12″	Clay	798.34	
**Westford circle, southerly	238	24″	Clay		
	366	18″	Clay	1,897.00	
					3,799.93

*Sanitary sewer. **Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Massasoit place, Massasoit st., easterly	381	12″	Clay		....
Massasoit st., Carew st., northerly	709	12″	Cem.	$579.69	
	131	10″	Clay	124.62	
Lexington ave., southerly	300	12″	Clay	366.86	
	298	10″	Clay		
Montmorenci st. to Lexington ave.	354	2′-2″x3′-3″	Con.	1,468.20	
*Montmorenci st., northerly across private land to Chapin terrace	377	2′-10″x4′-3′	Con.	2,758.01	
Pratt st., southerly	149	10″	Clay	218.09	
					$5,515.47
Mattoon st., Chestnut to Salem st.	356	1′-4″x2′-0″	Brick		778.21
	87	15″	Cem.		
Maynard st., State to Shattuck st.	431	15″	Clay	670.82	
	400	12″	Clay		
**Shattuck to State st.	581	18″	Clay	2,226.57	
**Shattuck to Acorn st.	597	18″	Clay	2,265.26	
	300	15″	Clay		
	354	12″	Clay		
†Shattuck st., northerly	1,029	10″	Clay	741.18	
					5,903.83
McKnight st., Catharine to Sherman st.	255	15″	Cem.	421.42	
	30	15″	Clay	56.78	
Catharine to Bowles st.	141	10″	Cem.	67.27	
	26	10″	Clay	75.32	
Bowles st. to Girard ave.	119	12″	Cem.	81.85	
	263	10″	Clay	233.51	
					936.15
Mechanic st., Water st., westerly	302	12″	Cem.	205.25	
	20	8″	Clay	72.99	
					278.24
Medford st., Birnie ave., easterly	390	12″	Clay		367.29
	183	10′	Clay		
Melrose st., sewer between Hickory and Melrose st.	429	18″	Clay		
Eastern ave. to Walnut st.	263	15″	Clay		
	558	10″	Clay		
Marshall place, Eastern ave. to Walnut st.	415	10″	Clay		1,791.93
	169	8″	Clay		
Cottage ave., Melrose st. to Marshall place	74	12″	Clay		
Meredith st., Belmont ave. to Washington st.	536	12″	Clay		2,162.60
	274	10″	Clay		

*Elliptical. †Sanitary sewer. **Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Merrick ave., King to Lebanon st	303	12″	Clay		$1,276.99
Merwin st., North Main to Chestnut st	774	15″	Clay		52.25
Middlesex st., Wilbraham road to Marlborough st.	296	15″	Clay		945.92
	304	12″	Clay		
	474	10″	Clay		
Milford st., Farnsworth to Los Angeles st	344	15″	Clay		942.13
Mill river, intercepting sewer, Mill river to Locust st	370	5′-3″ cir.	Brick	$6,066.64	
	691	4′-0″ cir.	Brick		
Locust to Hickory st	587	4′-0″ cir.	Brick		
	131	3′-6″x5′-3″	Brick		
	1,743	5′-9″ cir.	Brick	42,706.00	
	779	4′-3″ cir.	Brick		
	1,611	3′-3″ cir.	Brick		
*in Mill and Hickory sts.	833	2′-2″x3′-3″	Brick	9,355.23	
*Hickory st. to Gunn square brook by northerly shore of Watershops pond	4,495	2′-2″x3′-3″	Brick	45,545.71	
*in Hickory st., Gunn square brook, easterly	338	2′-2″x3′-3″	Con.	5,425.21	
					109,098.79
Mill st., Main st., easterly	236	8″	Cem.	75.45	
Locust to Pine st	943	2′-6″x3′-9″	Brick	4,764.79	
Knox to Maple st	352	18″	Clay	668.24	
Maple to Pine st	483	12″	Clay	1,602.68	
Dickinson st., easterly	325	24″	Clay	651.69	
					7,762.85
Miller st., Armory st., easterly	598	20″	Clay		2,216.18
	304	18″	Clay		
	300	15″	Clay		
	236	12″	Clay		
Monmouth st., Dorchester st., northerly and easterly	199	12″	Clay	218.15	
	171	10″	Clay	121.75	
Yale st., westerly	64	12″	Clay	45.95	
	278	10″	Clay	281.47	
Berkeley st., northwesterly	350	12″	Clay	235.62	
					902.94

* Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Monroe st., Hancock st. to Eastern ave.	611	24″	Clay		
	789	15″	Cem.		$4,068.02
Eastern ave. to Colton st.	316	12″	Cem.		
***Monrovia st.**, Page boulevard, southerly	1,086	10″	Clay		3,695.23
Monson ave., Greene st., northerly	200	8″	Clay		....
Montmorenci st., Chestnut to Massasoit st.	64	12″	Clay	$74.82	
	612	2′-10″x4′-5″	Con.	2,725.07	
					2,799.89
Montpelier st., Main to Niagara st.	297	24″	Clay		1,149.00
Montrose st., State to Burr st.	338	15″	Clay		
	217	12″	Clay		
	329	10″	Clay		2,316.06
**Burr st., southerly	350	15″	Clay		
	310	12″	Clay		
Moore st., Plainfield st., westerly	299	12″	Clay		
	435	10″	Clay		785.36
Mooreland st., Carew st., northerly to Van Horn ave.	601	18″	Clay		
	301	15″	Clay		
	299	12″	Clay		1,529.16
	212	10″	Clay		
Morgan st., Garden brook to Main st.	252	12″	Cem.	199.08	
	25	18″	Cem.	48.07	
Garden brook to North st.	634	18″	Clay	1,460.31	
					1,707.46
Morningside Park, White st., easterly	392	15″	Clay		503.67
Morrill ave., Carew st., northerly	214	10″	Clay		212.00
Morris st., Main to Central st.	915	2′-0″x3′-0″	Brick	2,942.83	
	496	12″	Cem.	359.07	
	195	24″	Clay	1,701.04	
					5,002.94
Mountainview st., Forest Park ave., easterly	297	12″	Clay		
	297	10″	Clay		28.19
Mulberry st., Maple st., easterly and northerly	426	15″	Clay		
	270	12″	Clay	885.41	
	629	12″	Cem.	595.59	
	246	10″	Clay	233.59	
west from Ridgewood terrace	144	15″	Clay	....	
					1,714.59
Murray Hill ave., Liberty st., northerly	....	....	Clay		195.06
Myrtle st., Card-factory Pond brook, northerly	107	10″	Clay		
	237	8″	Clay		69.76

*Sanitary sewer. **Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Myrtle st., I. O., Main to Worcester st.	377	24″	Clay	$1,003.44	
Worcester st., southerly	378	10″	Clay	355.34	
Berkshire st., southerly	180	10″	Clay	189.63	
Hampshire to Essex st.	434	10″	Clay	425.48	
					$1,973.89
Narragansett st., Lexington ave., northerly	320	12″	Clay	657.47	
	219	10″	Clay		
Lexington ave., southerly	250	12″	Clay	458.65	
	251	10″	Clay		
					1,116.12
Nelson ave., Greene st., northerly	310	10″	Clay	421.30	
Lebanon to King st.	188	10″	Cem.	143.78	
	67	10″	Clay	110.87	
					675.95
Nelson st., Nursery st., easterly	308	24″	Clay		....
New st., E. Court st., northerly	237	12″	Cem.	307.75	
	33	8″	Clay	14.18	
Dwight st., westerly	164	10″	Clay	272.59	
					594.52
Newbury st., Carew st. to Sherman ave.	1,070	10″	Clay		1,138.70
Newland st., Plainfield st., westerly	350	18″	Clay		
	349	15″	Clay		2,018.75
	555	12″	Clay		
Newman st., Knox st., westerly	174	12″	Clay		506.69
	127	10″	Clay		
Niagara st., Montpelier to Saratoga st.	220	18″	Clay	568.00	
Montpelier to Oswego st.	146	18″	Clay	386.53	
					954.53
Noble st., North Main to Chestnut st.	514	15″	Clay		1,142.99
Noel ave., Mill to Oakland st.	204	20″	Clay		
	146	18″	Clay		
	380	15″	Clay	2,512.92	
	486	12″	Clay		
	252	10″	Clay		
Orange st., northerly	30	12″	Clay	32.29	
					2,545.21
Norfolk st., Wilbraham rd., southerly	300	15″	Clay	566.08	
	300	12″	Clay		
	229	10″	Clay	155.85	

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
*Marlborough st., southerly	600	10″	Clay	$2,244.28	
					$2,966.21
North st., Ferry st., northerly	148	10″	Clay	223.34	
Carew st., northerly	190	8″	Cem.	84.88	
Church to Grosvenor st.	68	18″	Cem.	157.13	
Morgan to Ringgold st.	198	18″	Clay	876.47	
Osgood to Hebron st.	130	18″	Clay	426.85	
	165	10″	Clay		
Bancroft st. to Brookline ave.	302	18″	Clay	411.55	
Bancroft st., northerly	153	12″	Cem.	217.15	
	64	12″	Clay		
Jefferson ave., northerly.	233	8″	Clay	258.44	
Calhoun st., northerly	256	8″	Clay	109.36	
Waverly to Grove st.	362	12″	Clay	302.86	
Harriet st., southerly	86	8″	Clay	....	
Harriet to Cumberland st.	304	10″	Clay	389.10	
					3,457.13
Northampton ave., Wilbraham rd., southerly.	1,101	12″	Clay	877.47	
*Gunn square, northerly	126	10″	Clay	118.79	
*Gunn square to King st.	249	12″	Clay	340.32	
	202	10″	Clay		
*Gunn square, southerly.	459	8″	Clay	484.87	
†Gunn square to Beverly st.	173	18″	Clay	1,168.89	
	185	12″	Clay		
†Gunn square to King st.	313	24″	Clay	2,411.85	
	322	20″	Clay		
					5,402.19
North Church ave., Cook's ave., easterly	209	10″	Cem.		
Cook's ave., westerly (for cost see Cook's ave.)	133	10″	Cem.		....
No. Main st., Morgan st., southerly	232	8″	Clay	232.92	
Morgan st., northerly	173	8″	Clay	90.69	
Osgood st., southerly	199	10″	Clay	649.04	
Arch to Osgood st.	730	15″	Cem.	713.66	
**Arch st. to Jefferson ave.	185	2′-2″x3′-3″	Brick	974.27	
Jefferson ave. to Grove st.	359	24″	Clay	2,568.01	
	420	20″	Clay		
	285	15″	Clay		
Grove st., northerly	170	12″	Clay	226.45	
Douglas to Harriet st.	551	1′-8″x2′-6″	Brick	1,874.35	
Harriet to Waverly st.	250	24″	Clay	470.75	
Douglas to Eagle st.	326	2′-4″x3′-6″	Brick	1,840.24	
	272	1′-10″x2′-9″	Brick		

* Sanitary sewer. ** Elliptical. † Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Eagle to Walter st.....	296	24″	Clay	$952.02	
Wason ave. to Walter st..	215	2′-0″x3′-0″	Brick	860.00	
	349	1′-8″x2′-6″	Con.	1,577.72	
	155	24″	Clay	1,291.96	
	204	15″	Clay		
Wason ave., northerly...	600	12″	Clay	535.43	
Chicopee line, southerly..	106	15″	Clay	184.06	
	201	15″	Clay	812.39	
	199	12″	Clay		
					$15,853.96
Norwood st., Main to Hanover st.....	1,051	12″	Clay		2,082.06
Nursery st., Liberty to Franklin st.....	694	2′-8″ cir.	Brick	2,350.19	
Franklin st., northerly...	587	2′-8″ cir.	Brick	....	
					2,350.19
Oak st., Union to State st..	741	2′-0″x3′-0″	Con.	3,092.11	
Union to Tyler st.....	220	18″	Clay	752.00	
	268	15″	Clay		
Walnut to Tyler st.....	177	18″	Clay	339.99	
					4,184.10
Oak st., I. O., Chicopee river to Main st.....	684	4′-0″ cir.	Con.	4,404.88	
north from Main st.....	179	15″	Cem.	637.00	
	171	12″	Cem.		
Main st., southerly.....	590	2′-2″x3′-3″	Brick	2,345.84	
brick sewer to Hampshire st.....	797	24″	Clay	1,652.79	
Hampshire st., southerly.	285	18″	Clay	1,562.43	
	300	15″	Clay		
	400	12″	Clay		
Old Bay road, northerly.	313	10″	Clay	959.11	
Old Bay road, southerly..	1,547	12″	Clay	4,322.20	
					15,884.25
Oak Grove ave., State to Center st.....	349	18″	Clay		
	327	15″	Clay	....	
	254	12″	Clay		
Center st., northerly.....	621	10″	Clay	294.84	
Bay st., southerly.....	350	18″	Clay		
	350	15″	Clay	1,381.91	
	301	12″	Clay		
	325	10″	Clay		
*Shattuck st., southerly.	10	12″	Clay	991.12	
	319	10″	Clay		

*Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
*Shattuck to Bay st....	208	4′-0″ cir.	Con.	$6,656.50	
	260	2′-6″ cir.	Con.		
	702	27″	Clay		
	278	24″	Clay	11,324.05	
	280	20″	Clay		
	299	15″	Clay		
					$20,648.42
Oak Grove Park, Center st., westerly.....	144	10″	Clay		157.99
Oakland st., Belmont ave., southerly.....	311	10″	Clay	330.77	
Belmont ave. to Dickinson st.....	895	24″	Clay	2,249.94	
Dickinson to Orange st.	254	24″	Clay		
	350	18″	Clay	1,619.20	
	170	12″	Clay		
	218	8″	Clay	110.79	
Allen to Orange st.....	625	18″	Clay		
	304	15″	Clay		
	193	12″	Clay	1,569.22	
	404	10″	Clay		
Sumner ave. to Garfield st..	280	12″	Clay	468.60	
	221	10″	Clay		
Old Bay road, I. O., Parker st., westerly.....					6,348.52
	265	12″	Clay	1,616.05	
	255	10″	Clay		
Pine to Oak st	†594	3′-2″x4′-9″	Con.	7,074.97	
	191	3′-0″ cir.	Con.		8,691.02
Olive st., Eastern ave. to Logan st.....	540	10″	Clay		481.41
Olmsted drive, Dickinson st., westerly.....	271	12″	Clay	832.40	
Orange st., Bailey square to Euclid ave.....	1,119	3′-0″ cir.	Con.	6,744.60	
Euclid ave. to Oakland st	697	24″	Clay	1,973.44	
Oakland st., easterly.....	583	8″	Clay		
White st., westerly.....	381	12″	Clay		
	649	10″	Clay	1,240.87	
White st., easterly.....	924	10″	Clay		9,958.91
Orchard st., Plainfield st., westerly.....	325	20″	Clay		
	301	15″	Clay		
	297	12″	Clay		1,061.27
	494	10″	Clay		
Orchard st., I. O., South st., southerly.....	275	12″	Clay		
	350	10″	Clay		1,123.49
Orlando st., Sumner ave., southerly.....	127	12″	Clay	374.83	
	240	10″	Clay		

* Storm water sewer. † Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Belmont ave., northerly..	246	12″	Clay	$460.95	
	193	10″	Clay		
					$835.78
Orleans court, Orleans st., westerly.....	205	8″	Clay	....	
Orleans st., Union st., northerly.....	39	12″	Cem.	36.23	
	310	12″	Clay	456.19	
	330	10″	Clay		
Tyler st., northerly.....	188	10″	Cem.	187.74	
Pendleton ave., northerly.	231	12″	Cem.	327.73	
					1,007.89
Ormond st., Belmont to Sumner ave.....	275	10″	Clay		252.85
***Osborne terrace**, Page blvd. to Bowles park..	1,414	10″	Clay		1,421.18
Osgood st., Garden brook to Main st.....	257	15″	Clay	547.77	
Garden brook to North st.	340	24″	Clay	2,055.99	
	340	20″	Clay		
					2,603.76
Oswego st., Niagara st., easterly.....	256	15″	Clay		
	259	12″	Clay		1,309.66
	246	10″	Clay		
Oxford st., Riverview terrace, northerly.....	63	12″	Clay	....	
	227	12″	Clay	549.19	
	291	10″	Clay		
					549.19
Ozark st., Grand ave., southerly.....	229	12″	Clay		1,499.69
	227	10″	Clay		
***Page boulevard**, St. James ave. to Edendale st....	4,817	24″	Clay	22,208.48	
	1,830	20″	Clay		
**Poor Brook to Ardmore st.....	425	3′-0″ cir.	Con.		
	†365	3′-2″x4′-9″	Con.		
	1,234	5′-3″ cir.	Con.	55,687.35	
	842	4′-9″ cir.	Con.		
	325	3′-9″ cir.	Con.		
					77,895.83
Palm st., Crown st., northerly.....	320	10″	Clay		351.32
Palmer ave., Locust st., easterly.....	351	18″	Clay	1,304.34	
	337	15″	Clay		
	14	12″	Cem.	....	
					1,304.34

*Sanitary sewer. ** Storm water sewer. † Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Park st., Main to Willow st.	395	24″	Clay	$1,609.31	
Willow to Maple st.....	200	24″	Clay	1,431.05	
	557	18″	Clay		
					$3,040.36
Parker st., I. O., Chicopee river to Main st.....	32	24″	Clay	261.81	
	221	12″	Clay		
Main st., southerly.....	1,952	24″	Clay	7,457.50	
*Loon pond to B.&A.R.R.	1,227	12″	Clay	1,879.05	
					9,598.36
Parkside ave., Carew st. to Van Horn ave.....	350	18″	Clay		
	350	15″	Clay		1,198.20
	351	12″	Clay		
	300	10″	Clay		
Parkwood st., Sumner ave., southerly.....	215	12″	Clay		70.08
	204	10″	Clay		
Pasadena st., White st., southerly.....	156	12″	Clay	325.65	
	291	10″	Clay		
Johnson st., northerly...	358	10″	Clay	282.96	
Johnson st., southerly...	391	10″	Clay	369.66	
					978.27
Pasco road, I. O., Essex st., southerly.....	724	10″	Clay	607.80	
Duke st., southerly.....	543	2′-8″ cir.	Con.	15,057.64	
	816	2′-6″ cir.	Con.		
	149	24″	Clay	677.64	
Bay road, northerly.....	414	12″	Clay	1,279.71	
					17,622.79
Patton st., Garden brook to Main st.....	214	10″	Clay	173.73	
Garden brook, easterly...	352	18″	Clay		
	349	15″	Clay	1,615.37	
	537	12″	Clay		
					1,789.10
Peabody lane, Willow st., westerly.....	292	10″	Clay		332.17
Pearl st., Chestnut to Spring st.....	514	24″	Clay	1,792.62	
	447	20″	Clay		
Spring st., easterly.....	190	1′-6″ cir.	Brick	96.16	
					1,888.78
Pease st., Catharine to Bowles st.....	250	12″	Clay		50.58
Pecousic ave., Mill river to Main st.....	352	2′-8″x4′-0″	Con.	2,285.30	

* Surface drainage only.

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SEWER SYSTEM—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Main st., southerly.....	549	20″	Clay		
	299	18″	Clay	$4,041.98	
	180	15″	Clay		
York st., southerly.....	302	18″	Clay		
	300	15″	Clay	1,972.19	
	228	12″	Clay		$8,299.47
Penacook ave., Woodmont to Home st.....	253	12″	Clay	440.37	
Wait to Langdon st.....	97	15″	Clay	159.48	
					599.85
Pendleton ave., Walnut to Hancock st.....	287	18″	Cem.		
	524	15″	Cem.	1,663.94	
	429	12″	Cem.		
Hancock st. to Eastern ave.....	600	18″	Cem.	1,494.53	
	793	15″	Cem.		
					3,158.47
Pershing terrace, Benton st., easterly.....	473	10″	Clay		5,118.70
Phoenix st., Liberty st., easterly.....	236	18″	Clay		
	250	15″	Clay		840.32
	89	10″	Clay		
Phoenix terrace, Kendall ave. to Freeman terrace	300	15″	Clay		
	250	12″	Clay	1,247.23	
	251	10″	Clay		
Freeman terrace to Newbury st.....	243	12″	Clay	656.15	
	254	10″	Clay		
					1,903.38
Pierce court, Pendleton ave., southerly.....	166	10″	Clay		324.50
Pine st., Mill to Cedar st..	740	2′- 6″x3′-9″	Brick		
	1,529	3′- 6″x5′-3″	Brick	13,684.58	
	500	3′-10″x5′-9″	Brick		
Cedar to Walnut st.....	62	18″	Cem.		
	884	15″	Cem.	1,809.27	
	631	12″	Cem.		
					15,493.85
Pine st., I. O., Main st., easterly.....	1,896	24″	Clay	4,170.03	
*South of Franklin st. to Old Bay road.....	584	4′-2″x6′-3″	Con.	12,513.02	
					16,683.05
Pine st. court, Pine st., easterly.....	348	10″	Cem.		266.39
Pineywoods ave., Washington blvd., northeasterly.....	439	15″	Clay		
	263	12″	Clay	497.39	

*Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Magnolia terrace, westerly	350	10″	Clay	$42.93	
Magnolia terrace to Washington road	343	20″	Clay	....	
	404	15″	Clay		
Washington road to Forest Park ave.	341	12″	Clay	....	
					$540.32
Plainfield st., Sargeant to Fulton st.	414	18″	Clay		
	537	15″	Clay	2,525.13	
	456	12″	Clay		
	244	10″	Clay		
Washburn to West st.	154	12″	Clay	582.80	
	295	10″	Clay		
Washburn to Division st.	331	2′-8″x4′-0″	Brick	1,652.00	
	303	2′-6″x3′-9″	Brick	2,464.93	
	287	2′-4″x3′-6″	Brick	4,853.22	
	294	2′-2″x3′-3″	Brick		
	290	24″	Clay	1,036.73	
Rowland to Division st.	648	2′-2″x3′-3″	Con.	3,548.32	
	299	24″	Clay	1,419.29	
	208	15″	Clay		
Rowland st. to Talcott ave.	288	24″	Clay	1,354.45	
	299	20″	Clay		
Talcott ave., northerly	216	10″	Clay	303.96	
Laurel ave. to Demond ave.	228	12″	Clay	391.86	
Wason to Demond ave.	304	24″	Clay		
	249	20″	Clay	1,314.80	
	53	18″	Clay		21,447.49
Pleasant st., Bay st., southerly	296	12″	Cem		249.74
Plymouth st., Fulton st., easterly	375	10″	Clay		196.59
Pomona st., Sumner ave., northerly	580	12″	Clay	459.94	
	297	10″	Clay	204.92	
					664.86
*Porter ave., St. James ave. to Alpha st.	438	10″	Clay		1,027.21
Portland st., Birnie ave., easterly	251	12″	Clay		351.35
	224	10″	Clay		
Portsmouth st.	212	12″	Clay		348.70
Pratt st., Chestnut to Marvin st.	350	15″	Clay		869.53
	299	12″	Clay		

*Sanitary sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Prescott st., Belmont ave., northerly	340	10″	Clay		$250.22
Prince st., King to Lebanon st.	329	12″	Clay		1,543.33
Princeton st., Bay to Amherst st.	103	18″	Cem.	$418.79	
	689	18″	Clay	724.15	
	151	15″	Clay	177.72	
Yale to Vassar st.	537	12″	Cem.	691.77	
	222	12″	Clay		
St. James ave. to Cornell st.	298	12″	Cem.	195.52	
					2,207.95
Priscilla st., White st., westerly	220	10″	Clay		185.84
Private ways and private lands:					
*Albemarle st., easterly to Brook channel	135	3′-0″ cir.	Con.		1,591.20
Armory Hill sewer from Armory st., through private grounds east of Armory st. to Worthington st.	150	2′-5″x3′-7½″	Brick		
	900	2′-8″x4′- 0″	Brick		5,318.04
	249	2′-1″x3′-1½″	Brick		
Butler st., southerly	296	15″	Clay		978.39
Card-factory Pond, Woodworth ave., westerly between High and State sts.	751	12″	Cem.	408.75	
in front and around High school	492	24″	Clay	848.26	
High school to State st.	88	24″	Clay	192.35	
					1,449.36
in front and around High School of Commerce and on private lands easterly	142	15″	Clay		
	144	12″	Clay		....
	226	10″	Clay		
Cemetery brook, Morris st., easterly, north of Central st.	174	24″	Clay		569.59
Chester to Hancock st.	218	8″	Clay		....
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch st.					
about 300 feet east of Main st.	2,936	5′-6″ cir.	Brick		
	766	5′-0″ cir.	Brick		
	1,303	4′-6″ cir.	Brick	47,594.81	
	236	3′-0″x4′-6″	Brick		

* Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Worthington st., northeasterly to Lyman st., then via Railroad land to Armory st.....	3,274	4'-7¼" cir.	Brick	$30,194.20	
	952	4'-1" cir.	Brick		$77,789.01
East Springfield sewer, northerly and easterly from Albany st. through private land to Chicopee road.....	1,920	3'-9" cir.	Con.		
	760	2'-6" cir.	Con.		
	160	2'-10"x4'-3" Elliptical	Con.		17,567.09
*Gunn square brook sewer, from Hickory st., through private land to Albemarle st.....	1,585	15"	Clay		1,401.20
*Carlisle brook valley sewer, northerly from Hickory st.....	967	20"	Clay		
	1,821	18"	Clay		15,417.15
	66	12"	Clay		
Hickory to Melrose st. (see Melrose st.)	....	18"	Clay		....
Jefferson ave., passageway in rear of lots on south side.....	135	2'-0"x3'-0"	Brick	....	
	518	12"	Cem.	364.84	364.84
Main to Dale st., between Hubbard ave. and William st.....	655	12"	Cem.		441.92
Passageway, Ferry to Liberty st., 80 ft. east of Main st.....	210	12"	Clay		402.70
Potter place, State st., northerly.....	396	15"	Clay		
	301	12"	Clay		....
	274	10"	Clay		
Sewer in ave. Hampden st. southerly, near Water st.....	111	12"	Clay		147.14
Springfield st. via Atwater Glen to Springfield st..	677	3'-6" cir.	Brick		
	598	3'-3" cir.	Brick		
	389	4'-3" cir.	Brick		14,714.59
	1,292	3'-0" cir.	Brick		
	40	2'-0" cir.	Brick		
	16	2'-10"x4'-3"	Brick		

* Sanitary sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Warwick st., southerly...	190	18″	Clay		$1,266.74
	7	15″	Clay		
Prospect st., Chestnut to Massasoit st.....	218	18″	Clay		
	199	15″	Clay	$623.53	
	196	12″	Clay		
Massasoit st., easterly...	325	12″	Clay		
	423	10″	Clay	847.52	
					1,471.05
Pulaski alley, I. O., Parker st., easterly.....	225	12″	Clay		320.24
Pynchon st......	950	2′-0″x3′-0″	Brick		3,459 36
Quebec st., I. O., Lyons st., easterly.....	464	15″	Clay		1,364.77
	242	12″	Clay		
Queen st., Walnut to Hancock st.....	655	12″	Cem.		758.86
Quincy st., Oak to Stebbins st.....	860	12″	Cem.	651.15	
Hancock to Stebbins st...	522	12″	Cem.	549.58	
Hancock st. to Eastern ave.....	637	18″	Cem.	1,766.39	
	765	15″	Cem.		
Colton st. to Eastern ave.	208	10″	Clay	156.87	
					3,123.99
Railroad st., Water st. underpass, easterly....	168	12″	Clay	....	
	208	12″	Clay	290.55	
					290.55
Randolph st., Maplewood terrace, easterly.....	250	12″	Clay		22.96
	251	10″	Clay		
Ranney st., Wilmont st., southerly.....	85	10″	Clay	96.04	
Wilmont st., northerly...	200	10″	Clay	151.76	
Johnson st., northerly....	301	12″	Clay	426.13	
	264	10″	Clay		
Kensington ave., northerly.....	206	10″	Clay	149.18	
					823.11
Rapalus ave., I. O., Parker st., southerly.....	442	12″	Clay		448.05
Raymond ave., Carew st., northerly.....	277	10″	Clay		217.32
Redlands st., Page boulevard to Oklahoma st...	1,058	10″	Clay		2,420.48
Reed st., State st., southerly.....	219	12″	Clay		244.74
	362	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Revere st., White st., southerly	750	20″	Clay		
	250	12″	Clay		$2,053.58
	253	10″	Clay		
Richelieu court, Adams st., southerly	160	12″	Clay		
	315	10″	Clay		602.61
Richelieu place, Richelieu court, easterly	100	8″	Clay		....
Ridgewood place, Mulberry st., northerly	400	12″	Clay	$29.46	
	76	10″	Clay	101.95	
					131.41
Ridgewood terrace, Mulberry st., westerly	226	10″	Clay	....	
Union st., southerly	137	10″	Clay	162.13	
					162.13
Rimmon ave., Green lane to Weaver ramble	859	18″	Clay	....	
Weaver ramble, northerly	200	12″	Clay	....	
Hamburg st. to Chicopee line	251	12″	Clay		
	254	10″	Clay	787.19	
	170	8″	Clay	132.97	
					920.16
Ringgold st., North to Chestnut st	436	15″	Clay		
	312	12″	Clay		1,226.47
Ripley place, St. James ave., southerly	230	10″	Cem.		163.48
Rittenhouse terrace, Sumner ave. to Davision ave	250	18″	Clay		
	249	15″	Clay		
	249	12″	Clay		1,109.44
	128	10″	Clay		
Riverview st., Riverview terrace to Chase ave	63	10″	Clay	....	
	310	10″	Clay	354.50	
Forest Park ave., southerly	299	10″	Clay	239.39	
					593.89
Riverview terrace, Fort Pleasant ave., easterly	298	15″	Clay		
	322	12″	Clay		36.21
	105	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Rochelle st., Wilbraham road, southerly.....	424	18″	Clay		
	200	15″	Clay		
	260	12″	Clay		$1,188.31
	175	10″	Clay		
Rockland st., Sumner ave., northerly.....	549	12″	Clay		717.51
Rogers ave., I. O., Main st., southerly.....	97	15″	Clay		
	152	12″	Clay		356.39
	40	10″	Clay		
Roseland st., Plainfield st., westerly.....	350	18″	Clay		
	350	15″	Clay		1,530.97
	241	12″	Clay		
Rowland st., Conn. river to North Main st., including 630′ in Douglas st.	579	5′-3″ cir.	Brick		
	51	1′-8″x2′-6″	Brick		32,489.36
	1,247	6′-6″ cir.	Brick		
	1,330	6′-0″ cir.	Brick		
Roy st., Liberty st. to Chicopee road.....	160	15″	Clay		688.97
Rupert st., White st. to Kimberly ave.....	241	18″	Clay		718.57
	152	15″	Clay		
Ruskin st., Eleanor road, southerly.....	231	12″	Clay		422.04
	233	10″	Clay		
Rutland st., Wilbraham road to State st.....	199	8″	Clay		147.15
Rutledge ave., Main st., easterly.....	574	24″	Clay		126.40
Sachem st., Orange st., southerly.....	177	12″	Clay	$724.19	
Dickinson st., northerly..	330	10″	Clay	368.85	
					1,093.04
Sackett place, southerly of Worthington st....	128	12″	Clay		186.80
Salem st., Pearl st., south and east.....	283	18″	Cem.		
	99	15″	Cem.		879.36
	290	12″	Cem.		
***Sanford st.**.....	536	3′-2″x4′-9″	Brick		4,014.47
Saratoga st., Niagara to Richelieu st.....	233	15″	Clay		
	229	12″	Clay	1,168.63	
	129	10″	Clay		
Niagara to Main st.....	172	12″	Clay	564.58	
					1,733.21

* Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
*Sargeant st., Fulton to Main (cost shown under Clinton st.)	920	4′-6″x6′-9″	Brick		....
School st., Union to Mulberry st.	560	15″	Clay	$620.95	
Union st., northerly	258	10″	Clay	286.32	
					$907.27
Scott st., White to Pomona st.	300	12″	Clay		
	347	10″	Clay		468.68
Searle place, Walnut st., easterly	178	10″	Clay		231.61
Seventh st., Fulton to Main st.	830	12″	Cem.		908.09
Sewer in avenue (see private way).					
Sewer (see private ways).					
Shamrock ave., Orange st., northerly	30	12″	Clay		26.58
Sharon st., Garden brook to Main st.	209	15″	Clay	945.67	
	151	12″	Clay		
Garden brook, easterly	301	20″	Clay		
	300	18″	Clay	2,355.50	
	231	15″	Clay		
	232	12″	Clay		
					3,301.17
†Shattuck st., Carlisle Brook to Oak Grove ave.	1,074	4′-6″ cir.	Con.	28,188.01	
	259	4′-0″ cir.	Con.		
**Willard ave., easterly	212	8″	Clay	75.40	
**Maynard st., easterly	126	10″	Clay	63.17	
	164	8″	Clay		
**College st., easterly	96	8″	Clay	....	
					28,326.58
Sheffield st., Shillingford st., northerly	209	10″	Clay		234.97
Shefford st., Glenwood sewer southerly towards Springfield st.	293	12″	Clay	628.75	
	350	10″	Clay		
easterly towards Springfield st.	200	12″	Clay	790.42	
	225	10″	Clay		
*Springfield st., easterly	75	3′-2″x4′-9″	Con.	1,013.45	
*Springfield to Caseland st.	399	4′-9″x3′-2″	Con.	4,928.50	
					7,361.12

*Elliptical. †Storm water sewer. **Sanitary.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Sheldon st., Birnie ave. to N. Main st.	311	12″	Clay		$18.49
	317	10″	Clay		
Sherman ave., Kendall ave. to Newbury st.	550	15″	Clay		1,684 17
	550	12″	Clay		
	280	10″	Clay		
Sherman st., Bay to Clarendon st.	175	12″	Cem.	$571.12	
Bay to McKnight st.	443	12″	Cem.		
State to McKnight st.	301	18″	Clay		
	301	15″	Clay	1,314.14	
	544	12″	Clay		
					1,885.26
Shillingford st., Eastern ave. to Sheffield st.	640	12″	Clay		464.74
Silver st., Armory st., easterly	302	15″	Clay		733.99
	297	12″	Clay		
	251	10″	Clay		
Smith st., Knox to Dorne st.	199	12″	Clay	196.57	
Dorne st., westerly	107	10″	Clay	136.68	
					333.25
Somerset st., Dickinson st., westerly	317	15″	Clay		1,220.56
	305	12″	Clay		
	420	10″	Clay		
Sorrento st., Sumner ave., northerly	325	12″	Clay	376.55	
Grenada terrace, northerly	367	10″	Clay	302.93	
					679.48
South st., I. O., Healey ave. to East st.	151	12″	Clay	479.71	
	221	10″	Clay		
Healey to Orchard ave.	396	12″	Clay	905.72	
					1,385.43
Spencer st., Sumner ave., southerly	282	12″	Clay		889.54
	399	10″	Clay		
Spring st., south from Lyman st.	281	15″	Cem.		
	130	12″	Cem.		
Worthington to State st.	470	18″	Cem.	2,592.14	
	640	15″	Cem.		
	644	12″	Cem.		
Worthington st., northerly	132	12″	Clay	87.28	

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost.	
Worthington to Summer st.	183	5′-0″ cir.	Brick	$1,498.24	
	*49	4′-3″x6′-0″	Brick		
					$4,177.66
Springfield st., Atwater terrace, to northerly end of Shefford st.	892	20″	Clay		
	360	18″	Clay		
	413	15″	Clay	3,546.39	
	286	12″	Clay		
	437	10″	Clay		
†Glenwood sewer southerly to Shefford st.	135	3′-2″x4′-9″	Con.	1,824.12	
Glenwood sewer northerly to Hamburg st.	1,294	24″	Clay	3,889.98	
					9,260.49
Springfield st. and Glenwood (see private ways)					
Spruce st., Central st., northerly	600	12″	Cem.		609.90
Spruceland ave., Firglade ave., westerly	158	10″	Clay	268.87	
Magnolia terrace, westerly	67	8″	Clay	....	
Beechwood ave., easterly.	240	10″	Clay	395.58	
Beechwood ave., westerly.	300	10″	Clay	621.89	
Longhill st., easterly.	450	10″	Clay	410.40	
					1,696.74
Stafford st., Armory st., westerly	402	10″	Clay	367.88	
Cass st., easterly	285	12″	Clay	992.95	
					1,360.83
State st., Water st., westerly	70	12″	Cem.	45.27	
	91	12″	Cem.	71.19	
	82	12″	Clay	83.01	
Water to Main st.	907	18″	Cem.	1,199.78	
Main to Dwight st.	636	18″	Cem.	1,433.50	
†Dwight st. to High school	29	2′-8″x4′-0″	Brick		
	265	2′-2″x3′-3″	Brick	4,897.66	
	417	2′-0″x3′-0″	Brick		
at High school, connecting old with new	54	24″	Clay	161.88	
High school to Elliot st.	305	2′-0″ cir.	Brick	469.65	
High school to Walnut st.	726	2′-0″x3′-0″	Con.		
	306	2′-2″ cir.	Con.		
	1,440	2′-0″ cir.	Con.	6,442.79	
connecting new with old.	54	18″	Clay		

*Segmental. † Elliptical.

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SEWER SYSTEM.—*Continued*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Walnut to Oak st.....	250	18″	Clay		
	253	15″	Clay	$1,678.37	
	348	12″	Clay		
Federal st., easterly.....	695	2′-0″ cir.	Brick	1,062.40	
	130	12″	Clay	274.35	
Oak to Buckingham st. ..	2,110	18″	Cem.	2,848.93	
Hancock to Sherman st...	1,147	3′-4″x5′-0″	Brick		
Sherman to Mason st....	492	3′-0″x4′-6″	Brick	13,586.64	
Mason to Andrew st.....	726	3′-0″x4′-6″	Brick		
Andrew st. to Oak Grove ave.....	937	2′-10″x4′-3″	Brick	10,818.12	
east from Oak Grove ave. to Cortland st.....	548	2′-4″x3′-6″	Brick		
	283	2′-2″x3′-3″	Brick	5,056.93	
	352	2′-0″x3′-0″	Brick		
Cortland st., easterly....	355	24″	Clay		
	112	18″	Clay	4,659.94	
	3,399	12″	Clay		
					$54,790.41
State st. terrace, Shattuck ave., southerly.....	254	10″	Clay		217.57
Stearns square (West roadway), Bridge st., northerly.....	172	12″	Clay	205.83	
Worthington st.,southerly	201	12″	Clay	523.75	
					729.58
Stearns square (East roadway), Bridge st., northerly.....	167	8″	Clay	67.00	
Worthington st., southerly	148	12″	Clay	342.98	
					409.98
Stebbins st., Union to State st.....	300	12″	Clay		
	293	10″	Clay	596.89	
Union st., southerly.....	151	10″	Clay	196.80	
					793.69
†Sterling st., Armory to Hamburg st.....	917	2′-10″x4′-3″	Con.		14,176.97
Sterns terrace, Central st., northerly.....	393	12″	Clay		605.10
***Stevens st.,** Page boulevard to Eureka st.....	1,164	10″	Clay		1,362.10
St. James ave., State st., northerly.....	191	18″	Clay		
	467	12″	Clay	906.01	
	123	10″	Clay		
Bay st. to Ripley place...	91	12″	Cem.	135.23	
Florida st. to Ripley place	469	12″	Cem.	500.89	

* Sanitary sewers. † Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Florida st., northerly....	417	18″	Cem.	$1,073.90	
	300	12″	Cem.		
Clarendon to Westminster st.....	248	15″	Cem.	404.60	
Clarendon st., northerly..	138	8″	Clay	64.82	
Dartmouth to Harvard st.	385	2′-0″x3′-0″	Brick	2,738.53	
Harvard to Princeton st..	528	24″	Clay	1,799.94	
Princeton st., northerly..	308	18″	Clay		
	249	15″	Clay	965.55	
	57	12″	Clay		
Chicopee road to Page boulevard.	127	24″	Clay	396.52	
*Page boulevard to Porter ave.....	315	18″	Clay	790.13	
					$9,776.12
St. James boulevard, Page boulevard, westerly....	559	12″	Clay		2,300.78
Stockbridge st., Main st., easterly.....	777	18″	Cem.		1,101.77
Stockman st., Carew st. to Newbury st.....	879	20″	Clay		
	260	12″	Clay		2,931.18
	256	10″	Clay		
Stratford terrace, White st., easterly.....	190	12″	Clay		
	314	10″	Clay		593.35
Suffolk st., Wilbraham road, southerly.....	300	15″	Clay	381.25	
	300	12″	Clay	728.61	
	795	10″	Clay		
					1,109.86
Sullivan st., Armory st., easterly.....	395	12″	Clay		64.10
Summer st., Spring to Armory st.....	44	4′-3″x6′-0″	Brick		
	†1,344	4′-2″x6′-3″	Brick		24,173.10
	†1,093	2′-10″x4′-3″	Brick		
	†750	3′- 8″x5′-6″	Brick		
Summit st., Worthington to Federal st.....	204	12″	Clay		960.53
	263	10″	Clay		
Sumner ave., Fort Pleasant ave. to Longhill st..	448	12″	Clay	815.24	
	358	10″	Clay		

*Sanitary sewer. **Segmental. †Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Fort Pleasant ave. to Randolph st.	673	2′- 0″x3′-0″	Brick		
Randolph st. to Washington road	360	1′-10″x2′-9″	Brick		
Washington road to Forest Park ave.	360	1′- 8″x2′-6″	Brick	$7,968.46	
Forest Park ave. to Greenleaf st.	367	1′- 6″x2′-3″	Brick		
Greenleaf st. to Belmont ave	355	20″	Clay		
	851	18″	Clay		
	736	15″	Clay	2,915.88	
	272	12″	Clay		
	426	10″	Clay		
Belmont ave., easterly	100	8″	Clay	37.49	
†Dickinson to White st.	2,219	2′-8″x4′-0″	Brick	11,531.37	
White to Eloise st.	565	2′-2″x3′-3″	Brick	2,391.46	
	1,110	2′-2″x3′-3″	Con.	2,355.03	
	739	15″	Clay	3,833.46	
	1,251	12″	Clay		
					$31,848.39
Sumner terrace, Sumner ave., northerly	252	12″	Clay		462.38
	220	10″	Clay		
Sunapee st., White to Blaine st	376	15″	Clay		
	297	12″	Clay		1,245.54
	337	10″	Clay		
‡**Sycamore st.**, Acorn to Bay st.	325	20″	Clay		
	325	15″	Clay	2,983.46	
	315	12″	Clay		
*Acorn to Bay st.	899	8″	Clay	352.24	
					3,335.70
Sylvan ave., Belmont ave. to Fountain place	294	20″	Clay		
	251	18″	Clay	1,272.55	
	249	15″	Clay		
Fountain place, southerly	501	12″	Clay	1,393.43	
					2,665.98
Symonds ave., Worthington to Bridge st. (includes cost of Bond pl.)	300	15″	Cem.		696.89
Taft ave., Sylvan to Woodlawn st.	247	10″	Clay		201.65
Talcott ave., Fisk ave. to Plainfield st.	362	15″	Clay		
	316	12″	Clay		549.57

* Sanitary sewer. † Elliptical. ‡ Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Taylor st., Main to Chestnut st.....	330	20″	Clay		
	321	18″	Clay	$3,773.88	
	197	15″	Clay		
	50	12″	Clay	51.79	
	341	12″	Cem.	463.50	
					$4,289.17
Temple st., Maple to School st.	304	15″	Clay		
	300	12″	Clay	1,127.60	
	345	10″	Clay		
outlet into High school sewer.....	169	15″	Clay	171.71	
					1,299.31
Tenth st., Garden brook, easterly.....	300	18″	Clay		
	302	15″	Clay		1,293.88
	421	12″	Clay		
	4	8″	Clay		
Terrence st., Union to State st.....	374	12″	Clay		
	313	10″	Clay	565.26	
	48	10″	Cem.	34.02	
					599.28
Thomas st., Birnie ave., easterly.....	451	10″	Clay		364.91
Thompson st., Worthington st., southerly.....	603	12″	Cem.	638.27	
St. James ave. to Bay st..	703	15″	Cem.	886.56	
State to Bay st.....	852	12″	Cem.	757.02	
					2,281.85
Thorndyke st., Sumner ave., southerly.....	353	12″	Clay		
	398	10″	Clay		975.10
Tracy st., Franklin st., southerly.....	381	10″	Clay		238.36
Trafton road, Dickinson st., westerly.....	351	18″	Clay		
	460	15″	Clay	1,102.19	
	140	12″	Clay		
*Somerset st. to Forest Park.....	518	10″	Clay	984.67	
					2,086.86
Trenton st., Dickinson st. to Commonwealth ave.	146	10″	Clay		125.74
Trillium st., White to Greenbrier st..	345	10″	Clay		234.62

* Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Trinity terrace, Sumner ave. to Morningside park	300	12″	Clay		$533.91
	416	10″	Clay		
Tyler st., Oak to Orleans st.	419	15″	Clay	$769.02	
Orleans to Hancock st....	298	15″	Clay	653.33	
	171	12″	Clay		
	492	12″	Clay	571.84	
Hancock st. to Eastern ave.....	601	18″	Cem.	815.47	
	795	15″	Cem.	718.71	
Eastern ave., easterly....	251	10″	Cem.	199.75	
					3,728.12
Underwood st., Franklin st., northerly	483	10″	Clay		567.41
Union st., submerged outlet.....	165	24″	Wood	1,604.45	
	48	24″	C. Iron	391.23	
Conn. river to Main st...	1,610	3′-4″x5′-0″	Brick	8,806.18	
	53	2′-0″x3′-0″	Brick		
Main to Oak st	*718	3′-2″x4′-9″	Con.		
	951	2′-8″ cir.	Con.	13,447.59	
	1,021	2′-3″ cir.	Con.		
	1,504	2′-4″x3′-6″	Con.	7,638.58	
Oak to Orleans st.....	404	15″	Cem.	467.96	
Hancock to Stebbins st...	261	2′-0″x3′-0″	Brick	2,321.08	
	335	1′-10″x2′-9″	Brick		
Stebbins to Orleans st....	428	20″	Clay	788.30	
Hancock st. to Eastern ave.....	600	18″	Cem.	1,535.40	
	800	15″	Cem.		
Eastern ave., easterly....	248	10″	Clay	182.22	
					37,182.99
Van Horn place, Carew st., northerly	311	10″	Clay		541.21
Vassar st., Harvard st., northerly.....	550	12″	Cem.		153.37
Ventura st., Sumner ave., northerly.....	351	10″	Clay	289.51	
Grenada terrace, northerly	341	10″	Clay	254.12	
					543.63
Vermont st., Converse to Pomona st.....	258	15″	Clay		
	267	12″	Clay	558.98	
	225	10″	Clay		
Converse st., easterly...	314	12″	Clay	307.55	
					866.53
Vernon st., Water st., easterly.....	189	15″	Cem.	2,905.58	
	400	15″	Clay		
Main st., westerly.....	216	12″	Cem.	310.68	
	50	12″	Clay	328.78	
					3,545.04

*Elliptical.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Villa parkway, Wilbraham road, southerly.....	299	15″	Clay	$785.41	
	302	12″	Clay		
	453	10″	Clay	515.02	
					$1,300.43
Vine st., Main to Fulton st.	697	12″	Cem.		688.75
Vinton st., Liberty to Franklin st.....	357	12″	Clay	393.47	
	262	10″	Clay	252.13	
					645.60
Virginia st., Dickinson st. to Trafton road.....	348	15″	Clay		
	301	12″	Clay		770.73
	344	10″	Clay		
Wait st., Armory st. to Penacook ave.....	500	24″	Clay		
	470	20″	Clay		
	250	18″	Clay		2,422.92
	249	15″	Clay		
Walden st., Dickinson st., easterly.....	166	8″	Clay	174.46	
Commonwealth to Belmont ave.....	296	10″	Clay	168.26	
					342.72
Walker st., Water st., westerly.....	650	12″	Clay		688.37
Walnut court, Walnut st., westerly.....	211	10″	Clay		188.15
Walnut st., south from State st.....	69	1′-6″x1′-8″	Brick	85.23	
north from Charter ave...	292	10″	Clay	418.30	
Union st. to Charter ave..	279	12″	Cem.	482.50	
Union to Oak st.....	558	12″	Clay	792.64	
	17	12″	Cem.	20.50	
Cedar to Pine st.....	1,142	2′-0″x3′-0″	Brick	4,986.58	
Pine to Oak st.....	254	18″	Cem.	383.04	
Hancock to Cedar st....	784	15″	Cem.	1,289.38	
Hancock st., southerly...	180	12″	Cem.		
north from Manhattan st.	249	10″	Clay	238.06	
Florence st., northerly...	53	8″	Cem.	27.12	
Hickory to Florence st....	1,026	12″	Clay	1,006.69	
					9,730.04
Walter st., Birnie ave. to North Main st.....	385	12″	Clay		422.74
Waltham ave., Wilbraham road, southerly.....	911	12″	Clay		1,107.98
Wareham st., Grand ave., southerly.....	292	12″	Clay		1,663.92
	184	10″	Clay		

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Warner st., Fort Pleasant ave. to Longhill st.....	508	12″	Clay	....	
	198	10″	Clay		
	89	10″	Clay	$51.88	
					$51.88
Warriner ave., Locust st., easterly.....	448	12″	Clay		463.97
Warwick st., Heywood ave., easterly.....	730	15″	Clay		3,800.25
	139	10″	Clay		
Washburn st., Conn. river to B. & M. R. R.....	1,758	7′-0″ cir.	Brick		21,678.46
Washington boulevard, Longhill st. to Pineywoods ave.....	304	2′-4″x3′-6″	Brick	5,032.68	
	823	2′-2″x3′-3″	Brick		
	308	18″	Clay		
	200	15″	Clay	868.79	
	242	12″	Clay		
	330	10″	Clay		
					5,901.47
Washington road, Sumner ave., southerly.....	460	10″	Clay	166.40	
Pineywoods ave., northerly.....	281	15″	Clay	1,512.49	
	141	10″	Clay	149.77	
					1,828.66
Washington st., Dickinson st. to Commonwealth ave.....	306	12″	Clay	531.14	
	215	10″	Clay		
Commonwealth to Clyfton ave.....	269	15″	Clay	1,968.65	
Itendale to Woodlawn st.	259	12″	Clay	785.79	
	208	10″	Clay		
Itendale st. to Clyfton ave.....	152	12″	Clay	619.00	
					3,904.58
Wason ave., Conn. river to Plainfield st.....	451	3′-10″x5′-9″	Brick		
Plainfield st. to Fisk ave.	1,051	3′- 4″x5′-0″	Brick		
Fisk to Birnie ave.....	634	3′ 2″x4′-9″	Brick		16,642.62
Birnie ave. to North Main st.....	247	2′- 0″x3′-0″	Brick		
Water st., Gardner to Loring st.....	474	1′-10″x2′-9″	Brick	1,219.79	
Loring st., northerly.....	345	12″	Cem.	237.38	
Union to Margaret st.....	721	2′- 0″x3′-0″	Brick	2,367.61	
Union st., northerly.....	868	18″	Cem.		
Elm to State st.....	275	18″	Cem.	508.75	

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost
Elm to Pynchon st.....	43	2'- 0"x3'-0"	Brick	$198.00
	498	2'- 6"x3'-6"	Brick	2,949.29
Pynchon st., northerly...	252	18"	Clay	
	213	15"	Clay	4,602.16
	186	10"	Clay	
Worthington st., southerly	209	10"	Clay	444.76
Worthington to Hampden st.....	327	15"	Cem.	511.50
Hampden to Railroad st.	250	12"	Clay	497.29
				$13,536.53
Water st. underpass, Cypress to Railroad st....	359	18"	Clay	....
	236	15"	Clay	....
Waverly st., North Main to Chestnut st.....	473	20"	Clay	1,268.03
	487	10"	Clay	
Weaver ramble, Rimmon ave., westerly and northerly.....	480	12"	Clay	....
Webster st., Liberty to Franklin st.....	601	12"	Clay	505.99
Welcome place, Bay st., northerly.....	238	8"	Clay	17.84
Wellesley st., St. James ave. to Cornell st.....	236	12"	Clay	540.30
	224	10"	Clay	
Wellington st., Wilbraham road, southerly.	287	15"	Clay	
	244	12"	Clay	46.33
	291	10"	Clay	
Wendell place, Main st., easterly.....	458	15"	Clay	287.09
Wentworth st., Liberty st., westerly.....	339	12"	Clay	1,295.19
	154	10"	Clay	
Wesson st., Fountain place, westerly.....	349	10"	Clay	954.27
***West st.,** Connecticut river to Plainfield st...	635	15"	Clay	1,867.65
	511	12"	Clay	
West Alvord st., Sumner ave. to Daviston st.....	153	24"	Clay	
	268	20"	Clay	
	550	18"	Clay	1,608.24
	300	15"	Clay	
	412	12"	Clay	
Westernview st., Forest Park ave., easterly....	468	12"	Clay	539.60
	138	10"	Clay	

*Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Westford ave., Wilbraham road, southerly.....	300	15″	Clay		
	300	12″	Clay	$676.23	
	350	10″	Clay		
*Westford circle to King st.	541	12″	Clay	454.36	
†Westford circle, northerly.....	107	12″	Clay	91.09	
†Gunn square, southerly.	112	12″	Clay	164.52	
					$1,386.20
***Westford circle**, Albemarle st. to Westford ave.....	786	12″	Clay	1,457.52	
*Westford ave., southeasterly to Westford circle.	194	12″	Clay	301.11	
†Albemarle st. to Northhampton ave.....	433	3′-0″	Seg. Blk.		
	602	2′-6″	Seg. Blk.	8,472.45	
	39	3′-0″	Con.		
					10,231.08
Westminster st., Bay to State st.....	300	15″	Clay		
	300	12″	Clay	791.24	
	201	10″	Clay		
St. James ave., southerly.	773	12″	Cem.	794.10	
					1,585.34
White st., Allen to Orange st.....	747	24″	Clay	1,829.93	
	674	20″	Clay	1,729.93	
	274	18″	Clay		
Orange st. to Dawson ave.	388	15″	Clay	389.27	
	292	15″	Clay	300.87	
Gordon st. to Dawson ave.	192	10″	Clay	237.91	
Gordon st., southerly....	690	12″	Clay	746.74	
	207	8″	Clay	84.45	
Sumner ave. to Stratford ter.....	1,266	24″	Clay	2,104.72	
Sumner ave. to Trillium st.....	1,028	20″	Clay		
	166	18″	Clay	2,300.75	
	329	12″	Clay		
Belmont ave. to Trillium st.....	233	24″	Clay		
	191	12″	Clay	1,189.60	
	210	10″	Clay		
Belmont ave. to Dwight road.....	1,178	2′-8″x4′-0″	Con.	5,324.32	
Dwight road to Longmeadow line.....	179	24″	Clay	550.34	
					16,788.83

*Sanitary sewer. †Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Whiting st., Plainfield st., westerly	299	18″	Clay		
	297	15″	Clay		$834.16
	196	12″	Clay		
Whitney place, Water st., westerly	450	12″	Cem.		402.41
Whittier st., Sumner ave. to Longfellow terrace	301	18″	Clay		
	299	15″	Clay		
	301	12″	Clay		1,290.11
	221	10″	Clay		
Wight place, Water st., easterly	302	12″	Clay		
	150	10″	Clay		1,792.22
Wigwam place, Dickinson st., easterly	324	10″	Clay		533.70
Wilbraham ave., Wilbraham road, southerly	1,125	12″	Clay	$1,117.21	
Alden to Beverly st.	999	10″	Clay		
	1,180	8″	Clay	1,253.01	
†King st., southerly	318	12″	Clay	707.63	
†King st., northerly	299	18″	Clay		
	270	12″	Clay	1,596.36	
†Beverly st., southerly	117	10″	Clay	251.60	
†Beverly st., northerly	262	10″	Clay	512.68	
					5,438.49
Wilbraham road, State st., easterly	248	12″	Cem.	157.79	
State st. to Northampton ave.	1,451	2′-0″x3′-0″	Brick	6,373.06	
Northampton ave. to Bristol st.	472	2′-6″x3′-9″	Brick		
	476	2′-4″x3′-6″	Brick		
	478	2′-2″x3′-3″	Brick		
	473	2′-0″x3′-0″	Brick	9,095.14	
	254	1′-10″x2′-9″	Brick		
	256	1′-8″x2′-6″	Brick		
Bristol st., easterly	263	20″	Clay		
	405	12″	Clay	994.25	
*Watershop Pond, westerly	204	24″	Clay		
	318	20″	Clay	836.60	
					17,456.84
Wilcox st., Water st., easterly	548	15″	Cem.		
	327	12″	Cem.	1,000.75	
Water st., westerly	463	12″	Cem.	313.82	
					1,314.57

* Surface drainage only. † Storm water sewer.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Willard ave., State st., northerly	282	18″	Clay		
	300	15″	Clay	$785.26	
	241	12″	Clay		
**Shattuck st., southerly	389	12″	Clay	1,013.99	
					$1,799.25
William st., Water to Main st.	875	12″	Cem.	918.26	
	32	12″	Clay	125.28	
Main to Dale st.	351	12″	Clay	931.32	
	311	10″	Clay		
Water st., westerly	76	15″	Cem.	609.09	
	425	12″	Cem.		
					2,583.95
Willow st., Cross to State st.	413	12″	Clay	791.42	
Cross to Park st.	265	12″	Clay	378.17	
Union to Park st.	216	18″	Cem.	325.32	
Union st. to Hubbard ave.	219	10″	Clay	204.39	
					1,699.30
Wilmont st., Dickinson to Ranney st.	349	18″	Clay		
	450	15″	Clay		1,766.54
	386	12″	Clay		
Winchester st.	424	12″	Clay		431.64
Windsor st., Knox st., westerly	308	12″	Clay		
	266	10″	Clay		560.76
Winter st., Chestnut st., easterly	288	20″	Clay		1,635.82
Winthrop st., Main st., easterly	52	18″	Cem.	220.81	
	141	15″	Cem.		
	310	15″	Clay	1,045.76	
	230	12″	Clay		
					1,266.57
Wolcott st., Armory st., northerly	220	10″	Clay	....	
	206	10″	Clay	192.49	
Liberty st., northerly	138	10″	Clay	214.59	
					407.08
*Woodbine ave., Mill river intercepting sewer to Baxter ave.	1,071	10″	Clay		993.00
†Woodlawn st., Belmont ave. to Carlton st.	760	2′-4″x3′-6″	Con.		6,259.54
Woodmont st., Penacook ave. to Liberty st.	451	12″	Clay	1,128.77	
Liberty st., easterly	301	15″	Clay		
	328	12″	Clay	3,370.74	
	152	10″	Clay		
					4,499.51

*Sanitary sewer. **Storm water sewer. † Egg shape.

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SEWER SYSTEM.—*Continued.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Woodside terrace, Belmont ave., northerly...	451	10″	Clay	$373.16	
Forest Park ave., northerly.....	307	10″	Clay	53.48	
	64	6″	Clay		
					$426.64
Woodworth ave., State st., southerly.....	199	12″	Clay		
	131	10″	Clay		614.25
Worcester ave., Plainfield st. to Fisk ave.....	854	15″	Cem.		295.09
Worcester st., I. O., Myrtle to Chestnut st.....	4	24″	Clay		
	290	20″	Clay	945.80	
	382	2′-0″x3′-0″	Brick	1,283.00	
Chestnut to Holly st.....	670	1′-10″x2′-9″	Brick	2,398.09	
Oak st., easterly.....	275	12″	Clay		
	212	10″	Clay	542.93	
Pine st., easterly to Lyons st.....	546	20″	Clay		
	224	18″	Clay		
	601	15″	Clay	2,735.88	
	249	10″	Clay		
†In Worcester st. and across private land near B. & A. R. R. bridge..	250	18″	Clay	906.76	
					8,812.46
Worthington st., submerged outlet.....	194	24″	Wood	1,883.04	
	22	24″	C. Iron	176.25	
*Conn. river to Main st...	1,038	5′-7″x7′-0″	Brick		
*Main to Dwight st.....	821	5′-4″x7′-0″	Brick	33,510.28	
Dwight to Garden brook.	566	4′-0″x6′-0″	Brick		
Garden brook to Spring st.	738	4′-3″ cir.	Brick		
Spring st., branch north..	35	5′-0″ cir.	Brick	4,361.35	
Spring st., branch south..	47	2′-0″x3′-0″	Brick		
Spring st., easterly.....	40	18″	Cem.		
	242	15″	Cem.	614.35	
	251	12″	Cem.		
Autumn st., westerly....	113	12″	Cem.	118.78	
near Sackett ave.....	145	10″	Cem.	111.47	
West brook, easterly.....	329	15″	Clay		
	217	12″	Clay	1,110.54	
West brook to Autumn st.	231	15″	Clay	727.56	
Sackett ave., westerly...	98	12″	Clay	207.28	
Sackett to Kibbe ave....	337	12″	Cem.	335.37	
Kibbe ave. to Federal st.	794	15″	Clay	826.90	
Kibbe hollow, westerly to Magasine st.....	167	18″	Clay	381.28	

*Elliptical. † Storm water sewer.

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SEWER SYSTEM.—*Concluded.*

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Kibbe hollow to Bowdoin st.	833	2′-2″ cir.	Con.	$3,644.54	
near Magazine to Bowdoin st.	125	2′-8″x4′-0″	Con.		
	123	2′-8″x4′-0″	Brick		
	354	2′-1″x3′-1½″	Brick	21,193.17	
Bowdoin st. to St. James ave.	359	3′-4″x7′-2″	Brick		
	1,307	3′-4″x6′-9″	Brick		$69,202.16
X Court, Dickinson st., westerly and southerly.	34	10″	Clay	84.24	
	192	10″	Clay	19.05	
					103.29
Yale st., Dartmouth to Princeton st.	350	24″	Clay		
	359	18″	Clay	1,770.13	
	233	15″	Clay		
Princeton st., northerly	712	12″	Clay	524.54	
					2,294.67
York st.	1,203	7′-0″ cir.	Brick		13,988.16
Totals	864,983				$2,318,692.48

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

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RECAPITULATION BY SIZES.

DESCRIPTION	Length in Feet	Sizes	Material
Segmental	93	6′- 0″x4′- 3″	Brick and cem. mortar.
Elliptical shaped	1,038	5′- 7″x7′- 0″	" " "
" "	821	5′- 4″x7′- 0″	" " "
" "	1,095	4′-10″x7′- 3″	" " "
" "	1,949	4′- 8″x7′- 0″	" " "
" "	1,170	4′- 6″x6′- 9″	" " "
" "	1,040	4′- 4″x6′- 6″	" " "
" "	2,340	4′- 2″x6′- 3″	" " "
" "	1,746	3′- 8″x5′- 6″	" " "
" "	830	3′- 4″x5′- 0″	" " "
" "	536	3′- 2″x4′- 9″	" " "
" "	819	3′- 0″x4′- 6″	" " "
" "	1,093	2′-10″x4′- 3″	" " "
" "	2,506	2′- 8″x4′- 0″	" " "
" "	5,778	2′- 2″x3′- 3″	" " "
" "	417	2′- 0″x3′- 0″	" " "
Egg shaped	566	4′- 0″x6′- 0″	" " "
" "	1,131	3′-10″x5′- 9″	" " "
" "	1,074	3′- 8″x5′- 6″	" " "
" "	3,512	3′- 6″x5′- 3″	" " "
" "	359	3′- 4″x7′- 2″	" " "
" "	1,307	3′- 4″x6′- 9″	" " "
" "	8,787	3′- 4″x5′- 0″	" " "
" "	1,056	3′- 2″x4′- 9″	" " "
" "	2,877	3′- 0″x4′- 6″	" " "
" "	953	2′-10″x4′- 3″	" " "
" "	364	2′- 9″x4′- 1½″	" " "
" "	2,391	2′- 8″x4′- 0″	" " "
" "	4,818	2′- 6″x3′- 9″	" " "
" "	498	2′- 6″x3′- 6″	" " "
" "	150	2′- 5″x3′- 7½″	" " "
" "	8,573	2′- 4″x3′- 6″	" " "
" "	8,688	2′- 2″x3′- 3″	" " "
" "	603	2′- 1″x3′- 1½″	" " "
" "	18,874	2′- 0″x3′- 0″	" " "
" "	4,921	1′-11″x2′- 9″	" " "
" "	2,432	1′- 8″x2′- 6″	" " "
" "	917	1′- 6″x2′- 3″	" " "
" "	669	1′- 4″x2′- 0″	" " "
Circular	3,017	7′-0″	" " "
"	3,019	6′-6″	" " "
"	1,330	6′-0″	" " "
"	1,743	5′-9″	" " "
"	3,842	5′-6″	" " "
"	949	5′-3″	" " "
"	2,257	5′-0″	" " "
"	3,274	4′-7½″	" " "
"	1,762	4′-6″	" " "

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RECAPITULATION BY SIZES.—*Continued.*

DESCRIPTION	Length in Feet	Sizes	Material
Circular	3,362	4′-3″	Brick and cem. mortar.
"	952	4′-1″	" " "
"	2,399	4′-0″	" " "
"	385	3′-9″	" " "
"	677	3′-6″	" " "
"	2,209	3′-3″	" " "
"	2,549	3′-0″	" " "
"	2,072	2′-8″	" " "
"	1,520	2′-0″	" " "
"	190	1′-6″	" " "
Elliptical	416	2′-10″x4′- 3″	Brick-concrete.
"	245	3′- 0″x4′- 6″	" "
Segmental	60	5′- 0″x2′- 1″	Concrete.
Elliptical	385	4′-10″x7′- 3″	"
"	399	4′- 9″x3′- 2″	"
"	270	4′- 6″x3′- 0″	"
"	1,669	4′- 2″x6′- 3″	"
"	1,887	3′- 2″x4′- 9″	"
"	612	2′-10″x4′- 5″	"
"	4,261	2′-10″x4′- 3″	"
"	1,178	2′- 8″x4′- 0″	"
"	1,934	2′- 4″x3′- 6″	"
"	788	2′- 2″x3′- 3″	"
"	41	1′-10″x2′- 9″	"
Egg shaped	477	2′- 8″x4′- 0″	"
"	1,365	2′- 6″x3′- 9″	"
"	951	2′- 4″x3′- 6″	"
"	4,717	2′- 2″x3′- 3″	"
"	1,994	2′- 0″x3′- 0″	"
"	349	1′- 8″x2′- 6″	"
Circular	1,234	5′-3″	"
"	1,083	5′-0″	"
"	1,846	4′-9″	"
"	1,074	4′-6″	"
"	478	4′-3″	"
"	1,151	4′-0″	"
"	2,690	3′-9″	"
"	2,949	3′-0″	"
"	2,483	2′-8″	"
"	1,836	2′-6″	"
"	1,484	2′-3″	"
"	1,139	2′-2″	"
"	1,440	2′-0″	"
"	1,408	27″	Clay pipe.
"	42,944	24″	" "
"	360	22″	" "
"	36,532	20″	" "
"	56,553	18″	" "

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RECAPITULATION BY SIZES.—*Concluded.*

DESCRIPTION	Length in Feet	Sizes	Material
Circular	89,550	15″	Clay pipe.
"	170,978	12″	" "
"	162,216	10″	" "
"	13,814	8″	" "
"	351	6″	" "
"	19,493	18″	Cement pipe.
"	28,740	15″	" "
"	52,813	12″	" "
"	4,278	10″	" "
"	651	8″	" "
"	120	24″	Cast-iron pipe.
"	28	18″	" "
"	726	24″	Wood pipe.
"	290	18″	" "
"	433	3′- 0″	Segment block.
"	602	2′- 6″	" "
Miscellaneous shapes	919		Brick and cem. mortar.
Total	864,983		

GENERAL CLASSIFICATION, 1921.

	Feet	Miles
Brick	137,218	25.988
Brick-concrete	661	.125
Concrete	44,224	8.375
Clay pipe	574,706	108.846
Cement pipe	105,975	20.071
Cast-iron pipe	148	.028
Wood pipe	1,016	.192
Segment block	1,035	.196
Total	864,983	163.828

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COLLECTION.

Mains (Everything but House and Catch Basin Connections).

		For sewage only.	For sewage and surface water.	For surface water only.
1.	Lineal feet brick,		137,218	
2.	" " concrete,	3,016	35,951	5,918
3.	" " segment block,			1,035
4.	" " pipe,	38,227	617,444	26,174
5.	" " pipe extended during year,	8,152	13,995	7,940
6.	Number of inverted siphons,		1	
8.	Method of flushing: By connections with the water system.			
9.	Method of cleaning: By scrapers and flushing.			
11.	Number of direct connections with water mains for flushing,	16	663	
12.	Number of flushings of entire system during year,		20	
13.	Cost of flushing, per mile,		$41.07	
14.	Cost of cleaning, per mile,		$38.39	
17.	Number of storm overflows,		16	
18.	Method of ventilation: By manholes and wellholes and through house stacks.			

HOUSE CONNECTIONS.

1.	By whom made:	By Sewer Department as far as street line.
2.	Sizes,	6"
3.	Number made during year,	408
4.	Lineal feet laid during year,	7,500

GENERAL.

Total cost of collecting mains to date, ... $2,318,692.48
Proportion of cost of system paid for by abutters in fees, . . 40%+

Methods of assessing abutters and rate of assessment:—

Entrance fee of fifty (50) dollars for dwelling houses.

For buildings used for business purposes two (2) cents per square foot of area covered by the building for the two lower stories, and an additional charge of one half (½) cent per square foot of area covered by the building for each additional story.

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SUMMARY OF SEWERAGE STATISTICS.

(In form recommended by Sanitary Section of Boston Society Civil Engineers.)

For the Year Ending December 1, 1921.

SPRINGFIELD, MASSACHUSETTS.

GENERAL.

Population by Assessors' Estimate,		134,735
Total area of city,		33.1 square miles
Area served by sewerage system,		10.76 square miles
Collection system,	For sewage only,	7.810 miles
	For sewage and surface water,	149.735 miles
	For surface water only,	6.276 miles

Method of disposal,—Gravity flow to Connecticut River.

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REPORT

OF

WASTE DISPOSAL DIVISION

FOR FISCAL YEAR ENDING NOVEMBER 30, 1921.

Mr. Robert P. Marsh, Superintendent of Streets and Engineering, Springfield, Mass.

DEAR SIR:—I herewith submit a report of the work performed by the Waste Disposal Division, Department of Streets and Engineering, for the year ending November 30, 1921.

EXPENSE.

	Total Cost.	Amount Collection.	Unit Cost.
Ashes collection	$143,543.54	35,777 loads	$4.012
Maintaining dumps	7,670.99		
Rubbish collection	45,647.21	8,524 loads	5.355
Garbage collection	68,735.13	15,216.13 tons	
Cost of operating Logan Street Incinerator	1,008.02		

Amount received for garbage sold $10,000.00

ASHES COLLECTION.

During the past year we have extended the territory in which ashes and rubbish are collected several miles. Collections are now made in Rushville, on State street to Boston road, two miles further than last year on Berkshire avenue, and also in the Franconia district.

WORKING TESTS OF NEW EQUIPMENT: It is the policy of the division to adopt new equipment that will improve present methods and lower costs of collections as a means of meeting the high cost of hauling. This policy is followed only after a complete and satisfactory working test. Arrangements are being made with the Troy Trailer Company of Troy, N. Y., for a trial test of a side-dump trailer manufactured by them.

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The division is also collecting data through correspondence with several cities that are using trucks or trailers for the collection of ashes. In basing recommendations of approval of new equipment care will be exercised not to adopt a trailer until its worth has been proven.

STATISTICAL INFORMATION: The importance of knowing the expense of collection and disposal in unit costs, per cubic yard or per load, is apparent. This also must be the basis of comparison of our costs with those of other cities using motor-driven equipment. With this in mind, a continuous count or tally of the quantities of ashes and rubbish has been inaugurated. This count will also be used in determining daily collection routes of equivalent amounts. During the past few years the division has been very modest in its requirements for new and expensive ash handling equipment, as it was felt that in the near future economy would dictate a policy for the adoption of motor-driven vehicles.

CLEAN-UP WEEK: Preparedness against the menace of fire and danger of disease has been the main purpose of Springfield's Clean-Up Week campaign, conducted annually for the past seven years under the direction of the Springfield Chamber of Commerce and this department. Hundreds of tons of useless trash and rubbish, most of it inflammable, have been collected and disposed of, and innumerable unhealthful and unsanitary conditions eliminated since the campaign was tried out in the spring of 1914. From a small beginning the idea developed mainly through the spirit and co-operation shown by the public. It is now regarded as a fixed habit and an annual event.

ASH CONTAINERS: Among the most objectionable of all receptacles used for the storage of ashes are the calcium chloride cans. They are made of tin or very light metal. In removing the original contents it is necessary to cut or break the metal cover, thereby producing sharp, ragged edges. Not only are they dangerous to handle, but, when filled with ashes, are easily made defective when being removed to the curb. Much inconvenience and dissatisfaction is hereby caused to the property owner and results in considerable undeserved criticism of our collection forces.

RUBBISH COLLECTION: As has been stated in previous reports, the department has made a continuous effort to compel tenants to separate household waste from ashes. The results have been more in evidence than ever this year. The former too frequent complaints due to the unattractive appearance of paper and other rubbish on the dumps have been eliminated, and with it the ever-recurring dump fire. A comparison of the monthly quantity of paper collected during 1921 with the quantity collected in the same period in 1920 indicates an increase of 20 per

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cent during the past year, due to the continued low market price for salvaged waste. Owing to this large increase I would recommend that a new type of paper wagon with a large capacity be added to the equipment of this division. This addition would make long hauls less frequent.

GARBAGE COLLECTION: The collection of garbage during the past year has been very satisfactory, due principally to the fact that it has not been interfered with by the activities of private collectors, who make it a practice to collect the most desirable part of the material without schedule or definite limit. This work requires careful study and supervision. In accordance with the contract entered into with the Springfield Swine Breeders' Association, Incorporated, the department collects all of the garbage produced. This, together with the natural growth of the city, has resulted in an increase of approximately 66⅔ per cent over the collections of 1920. The fourteen new steel body wagons built in our department shops were used throughout the year. Owing to their method of operation they have proved to be far superior to the old heavy type of dump wagon.

COMPLAINTS.

During the year there were registered with this department nine hundred and seventy complaints by householders for neglect on the part of our collectors to remove refuse material. In many cases, after the receipt of the report of the inspector, the complainant is addressed, giving him a full statement of conditions found. While the number of complaints may appear large at first glance, an analysis shows that, while emanating from all sources, as a matter of fact, they represent an average of three a day from the 16,900 houses and other buildings which this division serves. I feel such a record must reflect credit on the department in its effort to serve the people.

In conclusion I wish to thank all those who have contributed to the measure of success attained by the division.

Finally I desire to extend to you our thanks for your earnest co-operation during the past year.

Respectfully submitted,

EDWARD G. BARNES,
Deputy Superintendent of Waste Disposal.

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REPORT

OF

STREET LIGHTING DIVISION

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1921.

Mr. Robert P. Marsh, Superintendent, Streets and Engineering, Springfield, Mass.

DEAR SIR:—I present herewith the annual report of the Street Lighting Division for the year ending November 30, 1921.

During the past year sixty-two arc lamps were installed. This is a greater number than were placed during the period of the war and immediately thereafter, as during this time the expenditures were curtailed as much as possible. It will be necessary to continue placing a larger percentage of lamps for the next few years so that the demands for improved lighting in the residential and outlying districts may be met.

The need for improved traffic lights has been felt, and, after investigating the different kinds in use in various cities, a Mushroom Light was installed on trial near the Hotel Kimball. This light has been giving excellent satisfaction, and I would recommend that more of this type be placed during the coming year.

The present type of ornamental lamp post has not proved satisfactory, therefore a new post, similar in design, but stronger, was decided upon, and will be tried out on the approaches to the new bridge.

In closing I wish to thank those who have contributed to the success of this division, and to thank you for the many courtesies that you have extended to me.

Respectfully submitted,

KARL S. RANNENBERG,
Acting Deputy Superintendent of Street Lighting.

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STREET LIGHTING DATA.

Number of lamps installed November 30, 1921:—

Pendant arcs connected overhead	553
Pendant arcs connected underground	1,409
Inverted arcs all connected underground	63
Incandescents connected overhead	380
Incandescents connected underground	91

Price per year:—

Pendant arcs	$70.00
Inverted arcs	75.00
Overhead incandescents	15.00
Underground incandescents	20.00

Type of lamps:—

Arc: 5 ampere, 400-watt General Electric Magnetite Arc with high efficiency electrodes. Pendant arcs have medium Alba globes. Inverted arcs have medium Alabaster Polycase globes.

Incandescent: 80-watt series Tungsten with radial wave reflector.

Hours per year: 4,000 for all lamps.

Current generated: Partly by Brush Arc machines, partly by rectifiers.

Inspection: Every lamp inspected twice each night by regular inspectors, besides police reports.

EXPENDITURES YEAR BY YEAR.

		Per Cent Increase Over Preceding Year.
1912	$111,485.16	6.94
1913	123,358.47	2.08*
1914	117,555.11†	3.25
1915	122,602.70	4.29
1916	132,645.06	8.19
1917	137,896.60	3.97
1918	140,897.77	2.18
1919	144,330.45	2.44
1920	147,523.31	2.21
1921	150,259.53	1.85

*18 months' bills were paid in 1913 and this was taken into consideration in figuring percentage of increase.

†In 1914 the salary of the Deputy Superintendent was charged to administration but in this table it is added to the street lighting account for purposes of comparison.

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DEPARTMENT OF CHARITIES

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BOARD OF

OVERSEERS OF THE POOR

FOR 1921.

HON. EDWIN F. LEONARD, *Chairman.*

WILLIAM R. THACKER, *Vice-Chairman,*	*Term expires April 1, 1922.*
CHRISTOPHER G. SIMPSON,	*Term expires April 1, 1923.*
J. STUART KIRKHAM,	*Term expires April 1, 1924.*
WILLIAM A. R. CHAPIN, M.D.,	*Term expires April 1, 1924.*

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REPORT

OF THE

BOARD OF OVERSEERS OF THE POOR

FOR THE

YEAR ENDING NOVEMBER 30, 1921.

To the City Council:—

The following report is submitted for your consideration:—

The resources of the department were as follows:—

Appropriation, General Administration,	$18,617.00
Almshouse,	63,728.83
Wayfarers' Lodge,	7,991.64
Outside Relief,	98,682.53
Collections made by the department and transferred to it,	9,036.62
Total,	$198,056.62

EXPENDITURES.

Total expenditures,	$182,434.29
Balance unexpended,	11,598.86
Cash advanced by Treasurer,	4,000.00
Reserved encumbrance, coal contract,	23.47
Total,	$198,056.62

Our total collections were $57,496.07. Of this amount $48,459.45 was turned into the General Funds.

Deducting the same from the total expenditures ($182,434.29), we have $133,974.84 as the net cost of the department for the year. This is an increase of $21,009.06 over the previous year.

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The increase in the total number aided is a fair index to the increased expenditure. In 1920, the total number was 2,024. In 1921, it was 4,389.

The statistical tables annexed give these and other particulars of interest relating to the work of the department.

These tables and statistics are made in conformity with reports of past years, our purpose being to provide data for those who desire to make comparisons.

OUTDOOR RELIEF.

There has been an increase in this expenditure as shown by the following statement:—

	1920	1921
Disbursed direct to poor by Agent,.....	$54,421.93	$87,219.02
Paid to hospitals in Springfield,.....	4,393.88	6,772.00
Paid to cities and towns for Springfield poor,...	1,719.80	3,482.55
Paid to state institutions,.....	687.45	1,207.46
	$61,223.06	$98,681.03

In our report of last year, we stated that "unless there is a general decline in the cost of living or a greater demand for labor, additional expense must be expected."

While there has been some decline in the cost of the necessaries of life, there has been little improvement in the labor situation; as a consequence we have had a steady and increasing demand for Outdoor Relief. This increase began in the early fall of 1920, and has continued without interruption.

Lack of employment is given as the cause in nearly every case. We have as far as possible provided work, in some instances securing it in industrial plants, but this has not been possible to any great extent. We have, however, provided work at the Wayfarers' Lodge and on the farm at the Almshouse, allowing $2.50 for 8 hours' work, paying for the same in orders and cash, usually dividing the payment equally.

This labor has to some extent yielded an income, but it is of particular value in determining the worthiness of the applicant and the necessity for granting assistance. We wish to acknowledge the assistance rendered our department by the City Council, who, at the suggestion of the Mayor, appropriated money to furnish work for the unemployed, placing the selection of the persons who should be given this employment in charge of the Agent for Soldiers' Relief. The officials both of the Street and Park departments have also aided in furnishing work as far as it has been possi-

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ble. This has been a saving to the city and we extend our thanks to all who have rendered this assistance.

At the present writing we do not look for any change until the coming spring and then only for a gradual improvement, depending upon the business situation.

It has been necessary to assist many families who have recently become residents of the city, attracted here by the lure of war-time wages. There has been a noticeable increase in the number of persons who have recently emigrated from the South.

That the high wages paid during the war have not been a lasting benefit to many who received them is evident from the records of this department.

From reports which we receive, we learn that there has been a greatly increased outlay for Outdoor Relief throughout the State, and that conditions have been much worse in some places than they have been here. In 1920 we paid $2,407.25 to various cities and towns and the State for aid to sundry persons belonging to Springfield. In 1921 the expense was $4,690.01.

It has long been recognized that the administration of Outdoor Relief requires careful investigation and follow-up work in each case. It is impossible for us to do this with our present force and we would suggest the employment of at least one visitor for this purpose.

ALMSHOUSE.

The total number of inmates during the year was 435 as against 350 for the preceding year. The average daily number was 116. In 1920 it was 108.

The average weekly cost per inmate was $8.45, a decrease of $1.07 per week compared with that of last year. This decrease is due to lower cost of provisions, fuel, and clothing. The total cost in 1920 was $66,-103.42, in 1921 it was $61,458.95.

Quite extensive repairs have been made on the roofs of the main buildings. There were also repairs on the stable.

A breakdown of the engine and dynamo, which furnishes light and power, requiring a month for repairs, entailed considerable expense in laundry bills and for the purchase of light while the plant was out of commission.

A majority of the inmates are aged and feeble and it is necessary to provide for over half the number in the Hospital Department, which has been somewhat crowded at times. An addition of a children's ward,

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fitted with modern conveniences, is now in process of construction. This will give better accommodation for the care of children, and the rooms now occupied by them will be available for adults.

Mr. Lyman W. Sexton and his daughter, Mrs. Mabel S. French, terminated their services as Master and Matron of the Almshouse, Nov. 1, 1921. Mr. Sexton had been Master for nearly thirty-four years, the longest period of continuous service, with one exception, in the State.

We wish to here record our appreciation of the faithful service and efficient management of both Mr. Sexton and Mrs. French. Under their supervision, the institution has been recognized as one of the best in the State. Their interest in the welfare of the inmates and their kindness to them won the respect of all with whom they have been associated.

We are very fortunate in securing the services of Mr. Charles E. Hadsell and wife, who, having had eighteen years' experience as Master and Matron of the Westfield Almshouse, are well qualified to fill the vacancy, and they assumed their duties November 1.

The City Physician made 341 visits to the Almshouse during the year.

The products of the farm were as follows:—

25	bushels peas,	$37.00
30	dozen squash,	10.00
20	bushels cucumbers,	20.00
40	baskets tomatoes,	30.00
	Swiss chard,	10.00
40	bushels string beans,	30.00
10	bushels shell beans,	15.00
10	bushels lima beans,	15.00
500	bushels potatoes,	750.00
25	bushels beets,	25.00
6,950	pounds carrots,	104.25
6	bushels parsnips,	6.00
2,600	pounds turnips,	21.66
2,400	pounds cabbage,	72.00
	Sweet corn,	100.00
320	bushels field corn,	240.00
21	tons hay,	630.00
	Ensilage,	150.00
	Beef sold,	230.00
4,302	pounds pork sold,	487.86
36,256	quarts milk at 15 cents,	5,438.40
	Beans, etc., sold,	11.29
		$8,433.46

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AID TO MOTHERS WITH DEPENDENT CHILDREN.

Aid to the amount of $22,896.61 was given, an increase of $974.96 over last year. At the end of the year we were aiding 40 families in this city and three families residing elsewhere.

During the year an important decision was rendered by the Supreme Court, settling a question which has been the subject of much controversy. A petition for a writ of mandamus, directing the Overseers of the Poor of the City of Gloucester to grant aid under the provisions of this law, was dismissed. The right of the State Department of Public Welfare to establish rules for granting the aid was sustained. The Court ruled that:—

"The furnishing of aid at the public expense, under G. L., chap. 118, to mothers with dependent children is not a mandatory duty committed to the overseers of the poor to be exercised in all cases where the mother is fit to bring up her children and the surroundings of the home are such as to make for good character. When assistance can be secured from relatives, organizations, or individuals, the overseers, in the exercise of a sound discretion and right judgment, properly may refuse to pay for the support of the mother and children from the public treasury."

HOSPITALS IN SPRINGFIELD.

There have been a larger number of patients supported, at the expense of this Department, than usual, and with increased rates charged by the hospitals the expense has increased from year to year.

The following was the expense for the past two years:—

	1920	1921
Mercy Hospital,.....	$1,949.10	$1,870.50
Springfield Hospital,.....	2,372.30	4,357.58
Wesson Memorial Hospital,.....	72.48	543.92
	$4,393.88	$6,772.00

We have paid $904.56 to the Massachusetts Hospital School at Canton for the support of children who belong to Springfield, the rate being $4 per week.

WAYFARERS' LODGE.

There were 902 tramps lodged and fed during the past year. In 1920 the number was 260.

We have issued orders for 3,136 days' work at the wood yard, connected with the Lodge, to applicants for aid, and under the direction of

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the keeper, Mr. David I. Steele, wood has been sawed and split ready for delivery.

There is at present no other wood yard in the city, and there has been a good demand for stove and grate wood. Seasoned wood has been difficult to obtain, due to the fact that owners of wood lots have refused to pay the high wages demanded by choppers and as a consequence very little wood has been cut. Prices have been high for what was available, but we trust that with decline in wages price will again be normal.

The financial statement is as follows:—

EXPENDITURES.

Salaries,	$2,225.52	
Wood,	4,688.92	
Miscellaneous,	794.37	
		$7,708.81

RECEIPTS.

From sale of wood,	$5,818.88	
Wood on hand December 1, 1921,	629.00	
Bills receivable,	179.38	
	$6,627.26	
Balance, net expense of running Lodge,	1,081.55	
		$7,708.81

Respectfully submitted,

WM. R. THACKER, *Vice-Chairman*,
C. G. SIMPSON,
WM. A. R. CHAPIN, M.D.,
J. STUART KIRKHAM,

Overseers of the Poor.

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STATISTICS

RECEIPTS AND TRANSFERS.

	Receipts.	Transfers.	
From Appropriation,			$152,820.00
From Additional Appropriation,			36,200.00
Various Cities and Towns:—			
Almshouse Care, $3,988.42			
Outside Relief, 5,469.10			
	$9,457.52		
The Commonwealth, for temporary aid, care of sick and transportation:—			
Almshouse Care, $1,816.74			
Outside Relief, 24,529.63			
	26,346.37		
Individuals for care at hospitals and aid reimbursed:—			
Almshouse Care, $5,558.72			
Outside Relief, 347.78			
	5,906.50		
Isolation Hospital, for lighting, heating, ambulance service, and ice,		$8,895.13	
Health and Fire Departments, for wood,		29.25	
Refund, Almshouse Salary,		67.81	
Soldiers' Relief, care at Almshouse,		44.43	
			9,036.62
Sale of farm products,	930.18		
Sale of wood,	5,818.88		
	$48,459.45		$198,056.62

EXPENDITURES.

For the support of persons at the Almshouse,	$61,458.95
Outdoor relief, not including hospital expenses,	90,701.57
The support of patients in the local hospitals,	6,772.00
The State Infirmary,	279.45
The Massachusetts Hospital School,	904.56
The Massachusetts Eye and Ear Infirmary,	1.50
Massachusetts General Hospital,	21.95

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Salaries,	$12,622.03
Automobile, running expense,	815.79
Miscellaneous expenses,	1,147.68
Wayfarers' Lodge,	7,708.81
	$182,434.29
Balance unexpended,	11,598.86
Cash advanced by Treasurer,	4,000.00
Balance reserved encumbrance on coal contract,	23.47
	$198,056.62

ALMSHOUSE.

Number of persons in Almshouse December 1, 1920,	97
Number admitted during the year,	338
Total number of inmates,	435
Number discharged,	302
Number remaining November 30, 1921,	133
Average number of inmates,	116

OUTDOOR RELIEF.

The total number aided was:—	
Having a settlement in the city,	1,732
Having a settlement elsewhere,	338
Having no settlement,	1,884
	3,954
The number of families aided was:—	
Having a settlement in the city,	375
Having a settlement elsewhere,	82
Having no settlement,	465
	922
The number of families aided for the first time was:—	
Having a settlement in the city,	198
Having a settlement elsewhere,	47
Having no settlement,	341
	586
The number of persons aided for the first time was:—	
Having a settlement in the city,	267
Having a settlement elsewhere,	66
Having no settlement,	467
	800

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EXPENSES OF OUTDOOR RELIEF.

(Including hospital aid.)

Persons having a settlement in the city,	$49,511.67
Persons having a settlement elsewhere,	9,864.00
Persons having no settlement,	39,305.36
	$98,681.03

The total number of persons aided during the year was 4,389.

Sixty persons have been sent to the State Infirmary at Tewksbury.

Nine hundred two tramps were lodged during the year.

One hundred nine notices were received from various cities and towns and the State, of aid rendered to persons whose settlement was claimed in this city.

The City Physician made 869 visits to the poor in their homes.

We have determined settlement in 212 cases for the Board of Health during the past year.

INVENTORY.

Almshouse:—	
Furniture, fixtures, and farm tools,	$10,603.45
Provisions and supplies,	10,746.27
Horses, cows, and other live stock,	1,810.00
Office:—	
Furniture,	741.00
Wayfarers' Lodge:—	
Wood,	629.87
Furniture,	799.35
Horses and vehicles,	272.00
	$25,601.94

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STATEMENT OF EXPENDITURES IN 1920–1921.

OUTDOOR RELIEF.

	Cash.	Transportation.	Fuel.	Provisions.	Clothing.	Medicine and Attention.	Cities and Towns.	Burials.	State Infirmary, Tewksbury.	Massachusetts General Hospital.	Hospital School, Canton.	Springfield Hospital.	Mercy Hospital.	Wesson Hospital.	Mass. Eye and Ear Infirmary.	Totals.
December,..	$2,163.34	$22.42	$249.85	$1,207.95	$167.15	$144.85	$1.50	$105.00	.....	.....	$204.57	$208.00	.....	.....	.....	$4,474.63
January,...	2,344.55	64.25	1,411.55	2,315.48	335.68	93.62	284.83	10.00	$90.82	.....	.....	201.00	$145.90	$65.92	.....	7,363.60
February,...	2,557.46	64.80	1,243.95	2,648.57	646.09	250.29	12.90	75.00	.....	.....	.....	130.50	106.08	44.82	.....	7,780.46
March,.....	2,985.04	55.47	1,003.95	2,688.44	737.82	26.42	45.25	30.20	.....	$21.95	124.00	148.00	.....	63.11	$1.50	7,926.15
April,.....	2,617.78	50.10	207.75	3,405.16	399.24	274.15	70.60	75.00	.....	.....	.....	402.50	172.36	106.51	.....	7,781.15
May,.....	2,447.64	164.69	77.90	3,260.70	558.56	76.30	374.44	79.00	.....	.....	.....	353.50	217.47	80.10	.....	7,672.30
June,.....	2,878.09	3.69	22.25	876.50	483.12	40.95	.....	50.00	.....	.....	.....	75.00	.....	35.74	.....	4,465.34
July,.....	2,618.18	229.35	.....	5,142.96	210.20	54.45	55.50	55.00	172.39	.....	194.28	465.00	53.64	24.38	.....	9,275.33
August,....	2,853.15	657.25	10.75	3,660.20	95.37	62.19	348.94	20.00	.....	.....	.....	450.00	680.54	33.60	.....	8,871.99
September,.	3,333.99	341.21	14.00	4,002.68	689.51	61.15	.....	30.00	.....	.....	178.28	684.00	118.36	89.74	.....	9,542.92
October,....	2,931.92	159.85	3.75	3,888.84	1,165.98	147.55	.....	85.00	.....	.....	.....	319.00	.....	.....	.....	8,701.89
November,.	2,997.02	82.10	.....	3,888.45	924.39	160.30	2,288.59	95.00	16.24	.....	203.43	926.08	376.15	.....	.....	14,825.27
	$32,728.16	$1,877.18	$7,113.22	$36,985.93	$6,418.11	$1,892.22	$3,482.55	$709.20	$279.45	$21.95	$904.56	$4,357.58	$1,870.50	$543.92	$1.50	$98,681.08

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STATEMENT OF EXPENDITURES IN 1920–1921.— CONTINUED.

ALMSHOUSE.

	Maintenance.	Salaries.	Furniture and Repairs.	Totals.
December,	$1,525.38	$1,558.37	$223.18	$3,306.93
January,	1,657.79	1,762.51	482.14	3,848.44
February,	1,683.59	1,657.87	102.24	3,443.70
March,	1,236.90	1,727.22	368.62	3,332.74
April,	3,144.74	1,675.52	534.40	5,354.66
May,	2,907.37	1,748.39	262.23	4,917.99
June,	12,910.96	1,790.91	1.40	14,703.27
July,	2,445.25	1,863.01	1,200.08	5,508.34
August,	2,145.85	2,052.85	120.96	4,319.66
September,	1,933.83	1,834.53	52.42	3,820.78
October,	2,214.97	1,628.52	1,088.54	4,932.03
November,	1,787.69	1,784.72	398.00	3,970.41
	$35,594.32	$21,065.06	$4,780.21	$61,458.95

GENERAL ADMINISTRATION.

	Salaries.	Miscellaneous.	Totals.	Wayfarers' Lodge.
December,	$998.33	$164.44	$1,162.77	$937.66
January,	998.33	47.50	1,045.83	1,581.38
February,	998.34	128.99	1,127.33	524.19
March,	998.33	149.88	1,148.21	325.44
April,	1,090.97	182.98	1,273.95	884.27
May,	1,033.32	119.53	1,152.85	601.73
June,	1,033.34	238.16	1,271.50	266.47
July,	997.58	158.73	1,156.31	204.87
August,	1,145.49	237.73	1,383.22	155.23
September,	1,108.34	153.68	1,262.02	235.86
October,	1,108.33	183.55	1,291.88	611.36
November,	1,108.33	201.30	1,309.63	1,380.35
	$12,619.03	$1,966.47	$14,585.50	$7,708.81

TOTALS.

	Outdoor Relief.	Almshouse.	General Administration.	Wayfarers' Lodge.	Grand Totals.
December,	$4,474.63	$3,306.93	$1,162.77	$937.66	$9,881.99
January,	7,363.60	3,848.44	1,045.83	1,581.38	13,839.25
February,	7,780.46	3,443.70	1,127.33	524.19	12,875.68
March,	7,926.15	3,332.74	1,148.21	325.44	12,732.54
April,	7,781.15	5,354.66	1,273.95	884.27	15,294.03
May,	7,672.30	4,917.99	1,152.85	601.73	14,344.87
June,	4,465.34	14,703.27	1,271.50	266.47	20,706.58
July,	9,275.33	5,508.34	1,156.31	204.87	16,144.85
August,	8,871.99	4,319.66	1,383.22	155.23	14,730.10
September,	9,542.92	3,820.78	1,262.02	235.86	14,861.58
October,	8,701.89	4,932.03	1,291.88	611.36	15,537.16
November,	14,825.27	3,970.41	1,309.63	1,380.35	21,485.66
	$98,681.03	$61,458.95	$14,585.50	$7,708.81	$182,434.29

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REPORT

OF THE

CITY PHYSICIAN

SPRINGFIELD, MASS., January 15, 1922.

To His Honor, the Mayor, and Gentlemen of the City Council:—

The duties of the City Physician during the past year have been both administrative and professional. With the growth of the city has come a corresponding growth in the City Hospital, and we have endeavored to keep pace with it.

Several needed changes have taken place at the City Hospital. The services of an especially well-qualified hospital superintendent have been acquired, and both she and her nursing staff are at a very high point of efficiency.

The new children's ward will be completed and dedicated before the end of the present month and facilities for handling sick children will be greatly enhanced.

A steam table for the diet kitchen is being added, which will keep food warm while being served.

New locker rooms in the basement for the storage of clothing of patients will open two rooms which have hitherto been closed.

Linoleum for the hospital floors will add greatly to the sanitation, safety, and cleanliness, as well as making the added work of more hospital space, and an increased number of patients, easier to handle with our present staff.

Several agencies have been generous to the hospital during the past year. Especially was this shown at Christmas time and as a result we now have a victrola in each ward.

The per diem increase for the year 1921 over 1920 in the hospital was eight. The number of patients outside the hospital is still showing an increase which is now about three times normal.

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Number of people treated for Overseers of Poor,	921
Number of visits made to Almshouse,	351
Number of visits made to Police Station,	24
Number of visits made for Soldiers' Relief,	12
Number of examinations made for City Solicitor,	5

In conclusion, I appreciate the hearty co-operation of those in authority for whom and with whom I am working in an effort to alleviate the conditions of those whom I serve.

Respectfully submitted,

WM. A. R. CHAPIN, M.D.,
City Physician.

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REPORT

OF THE

SOLDIERS' RELIEF COMMISSIONER

SPRINGFIELD, MASS., December 12, 1921.

To His Honor, the Mayor, and the City Council.

GENTLEMEN:—I have the honor to respectfully submit the following report for the fiscal year one thousand nine hundred twenty-one. The aim of this department is to assist ex-service men or their widows and minor children in any way possible. I will endeavor to give a synopsis of the kind of work done by this department other than financial aid.

A demand for aid under the Soldiers' Relief Laws for the year was beyond all expectations of the department. The unemployment situation was responsible to a large degree for the increase of aid over last year. We were required to aid a great many ex-soldiers who were physically able to work if they could find it. The work for the unemployed created by the Mayor came to the rescue of that class and we were able in the case of married men to drop them from the rolls or at least to reduce the amount of aid and give them employment. The work was eagerly accepted in practically every case. We have given employment other than city work to one hundred ninety-one ex-service men of the Spanish and World wars, thanks to the people who called by phone or in person and expressed a desire to give the service men preference. I know of only four cases where the men sent out did not prove satisfactory. Some even took the trouble to call this office and thank us for the men sent out and in cases of temporary work asked for the same man more than once. Four veterans were sent to the Soldiers' Home from this office. Fifty applications for the increase of pension for Civil War veterans were sent to the Bureau of Pensions at Washington, D. C. Twenty accrued pension or reimbursement applications in cases of deceased soldiers or widows were filed with the Bureau. Ten pension claims for widows were successfully settled with accrued pensions ranging from $286 to $975. Three claims for World War veterans for back pay not received

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in service were settled for over $300. Over two hundred affidavits were made out for veterans making a claim for pension or compensation to the respective bureaus. Twenty-five applications for the State Bonus were filled out. Three applications that had been disapproved were finally settled in cases of widowed mothers. Ten applications for certificate in lieu of lost discharge were made out. Two hundred fifty-four applications for various kinds of aid were disapproved as not coming under our State Aid or Soldiers' Relief Laws in regard to settlement in this city. If the veterans or widows had a claim in Massachusetts, the city or town where they had a settlement was notified and a great many cases were taken care of in this way. We had one hundred seventy new cases that were taken care of this year, in addition to the old cases. Through the generosity of a society in Springfield we were able to get clothing and shoes for a number of families who were very much in need during the cold weather.

The burial agent has been called upon to apply for the State Burial Allowance in the case of ten indigent soldiers or their wives, six being approved. The State Allowance is $58 to be paid only when the total amount of burial expenses by whomsoever incurred does not exceed $135.

By direction of the Mayor, August 1, this office was called upon to take applications for employment on the work created to help the unemployment situation in this city. With this idea in view we tried to give work to the needy for a few hours per day that they might be earning enough to at least get food for their families and at the same time have part of the day to look for permanent employment. The requirements were that applicants must be married or the sole support of a widowed mother or having a father physically unable to do the work himself; a resident of Springfield for one year; no bank account or Liberty Bonds and able to handle a pick or shovel. Those found eligible were sent to the Park or Streets and Engineering departments and given work for five hours per day at forty cents per hour. The applications were made in duplicate, the Union Relief Association using the copies to investigate and the originals being filed in this office awaiting the approval of the investigators. When the man was sent to a certain department it was recorded on the back of his card so that we kept in touch at all times with the approved cases. I wish to take this opportunity to express my appreciation for the very efficient manner in which the investigations were handled. We had well over four thousand go through this office from which we accepted nine hundred seventy-five applications, of which two hundred thirteen were disapproved after a

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thorough investigation by the Union Relief Association. The examination at this office consisted merely of asking the required questions mentioned above. A number of men have been put to work twice after completing their first allotment of one hundred twenty hours. Following is a list of expenditures under the different headings:

SOLDIERS' RELIEF EXPENDITURES.

Soldiers' Relief, all wars,	$23,644.96
State Aid, Civil War,	8,182.00
State Aid, Spanish War,	248.00
State Aid, World War,	276.00
Military Aid, Spanish War,	1,350.00
Military Aid, World War,	3,062.00
Burial allowance to undertakers,	337.50
Burial Agent's fees,	12.00
Total,	$37,112.46

UNEMPLOYMENT EXPENDITURES.

Office supplies, four months,	$75.08
Including index files, printing, stamps and envelopes.	

	WAGES.	
	Park Dept.	*Street Dept.*
August,	$1,077.20	$2,820.60
September,	1,457.60	2,248.80
October,	4,396.33	1,450.00
November,	5,657.65	.....
	$12,588.78	$6,519.40

Respectfully submitted,

GEORGE A. ROBERTS,
Soldiers' Relief Commissioner.

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REPORT

OF

SOLDIERS' AND SAILORS' GRAVES

SPRINGFIELD, MASS., December 27, 1921.

To His Honor, the Mayor, and City Council.

GENTLEMEN:—I have the honor to report that the passing year has been an uneventful one. Frequent visits to the several cemeteries have been made and in all of them the care given the graves in which the city is interested has been satisfactory, and shows a marked improvement over the conditions prevailing a few years ago.

Seventeen veterans of the Civil War died in the city during the year. Of these twelve were buried in the city, and the bodies of five were taken beyond our limits for burial.

During the year the War Department has filled my requisition for nine Government headstones.

The expense incurred during the year has been:—

For Peabody Cemetery	$480
For St. Michael's Cemetery	100
For St. Benedict's Cemetery	52
For Sixteen Acres Cemetery	20
For St. Matthew's Cemetery	15
For St. Aloysius Cemetery	7
For Cherry Street Cemetery	2
For salary of Supervisor	200
Total	$876

Respectfully submitted,

JOHN C. CONDON,

Supervisor of Soldiers' and Sailors' Graves.

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REPORT

OF THE

SEALER OF WEIGHTS AND MEASURES

To His Honor, the Mayor, and City Council.

GENTLEMEN:—In accordance with section thirty-four of chapter ninety-eight of the General Laws, I herewith submit the annual report of the Department of Weights and Measures for the fiscal year ending November 30, 1921.

During the fiscal year this department has completed the work of testing and sealing weighing and measuring devices within the city and has given as much attention to inspections in the various lines and to the reweighing of commodities as its limited force would permit. With the present growth of our city and the ever increasing number of stores and other business enterprises, it will be but a short time before an increase in the force of this department will be necessary in order that the duties incumbent thereon may be given the attention they justly demand.

We have attended to six hundred and sixty-one special calls for service to test weighing or measuring devices either of new installations or after repairs have been made, in addition to several requests for reweighing of commodities after delivery for the purpose of determining whether or not the correct quantity had been delivered by the dealer.

Twelve thousand one hundred devices and scales have been sealed, one thousand three hundred and fifty-three adjusted, eight hundred sixteen condemned, and one hundred fifty-four non-sealed.

Total number of trial weighings and measurements of commodities sold or put up for sale is three thousand one hundred fifty-nine, number found to be correct one thousand one hundred sixty-eight, overweight one thousand four hundred eighteen, underweight five hundred seventy-three.

Inspections of stores one hundred forty-three; thirty-three peddlers' licenses inspected; thirty-nine peddlers' scales, four thousand nine hundred forty-seven ice cream cans, one hundred thirty-two manufacturers' sealed milk bottles and fifty-five miscellaneous devices inspected.

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Four Transient Vendors' licenses have been granted in accordance with chapter one hundred and one of the General Laws, for which the city received one hundred and fifty-one dollars and ninety cents in fees. Forty-five loads of coal in transit have been weighed, with the result that fifteen were found to be correct, twenty-one overweight, and nine underweight, the error in nearly every instance being only a slight variation from the correct weight. Sealing fees collected in accordance with section fifty-six of chapter ninety-eight of the General Laws amounting to one thousand one hundred sixty-nine dollars and twenty-four cents have been turned over to the City Treasurer.

The automatic liquid measuring device for dispensing motor fuel and other liquids continues to be an important factor, demanding much time and attention in testing and sealing. There are many improved types of devices for this purpose being produced by the manufacturers, together with improved attachments to some of the types already installed, as a safeguard against errors on the part of the operator and that the consumer may readily check up his purchase. These improvements are the result of earnest co-operative effort on the part of the manufacturer with the Weights and Measures Officials, Nation, State and Local, all of whom have given this subject serious consideration.

The spirit of co-operation between the Division of Standards of the Commonwealth and the local department has been all that could be desired. Director Francis Meredith and the State Inspectors have shown themselves at all times desirous of exchanging ideas and suggestions as to the best methods of meeting the conditions brought about by Legislation, new devices, and changing methods of merchandising commodities, resulting in a better understanding by all concerned.

The same co-operation has been manifested by the Officials of the United States Department of Agriculture, Food and Drug Inspection Station at Boston, by Dr. C. E. Holton, Acting Chief, and Inspector F. P. Hamill, who in a number of instances have taken up complaints of this department on misbranding and short weight packages of food in cases of interstate shipments which is not within our jurisdiction, except to prevent the sale of such goods within the city. They trace the goods to the source of production and correct the trouble, by either seizing the goods or by prosecuting the manufacturer or both. This work is far reaching in its effect, not only benefiting this community but the entire country.

The work of the department in tabulated form as submitted in my annual report for the fiscal year 1921 to the Director of the Division of Standards of the Commonwealth follows:—

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	Sealed.	Adjusted.	Non-sealed.	Condemned.
Platform scales over 5,000 pounds...	76	11	2	12
Platform scales 100 to 5,000 pounds.	302	138	50	38
Beam scales	81	32	20	19
Counter scales	256	141	19	65
Spring scales	887	151	17	245
Computing scales	659	254	2	277
Jewelers' scales	27	4		1
Personal weighing scales	111			9
Prescription scales	84	41		1
Avoirdupois weights	4,435	148		8
Apothecary weights	815	166		52
Metric weights	303	50		3
Troy weights	351	76		1
Gasoline pumps	357	25		46
Oil pumps	264	17	44	4
Molasses	58			6
Dry measures	29			
Liquid measures	1,224			10
Ice cream cans	100			
Yardsticks	552			11
Steel tapes	31			
Computing measuring devices	30			2
Quantity stops	1,068	99		6
	12,100	1,353	154	816

TRIAL WEIGHINGS AND MEASUREMENTS.

	Tests.	Correct.	Under.	Over.
Coal in paper bags	45	5	6	34
Coal in transit	45	15	9	21
Wood	4		4	
Ice	16	1	10	5
Grain and feed	2	2		
Flour	180	45	15	120
Butter	252	166	29	57
Dry commodities	586	405	39	142
Liquid commodities	618	106	254	258
Fruits and vegetables	339	139	81	119
Meats and provisions	158	95	25	38
Bread	904	189	95	620
Confectionery	6		3	3
Coal after delivery	4		3	1
Totals	3,159	1,168	573	1,418

Respectfully submitted,

WILLIAM FOSTER,
Sealer of Weights and Measures.

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REPORT

OF THE

INSPECTOR OF ANIMALS

SPRINGFIELD, MASS., January 7, 1922.

To the Common Council.

GENTLEMEN: As Inspector of Animals I have the honor to hand you herewith my report for the year 1921.

Following orders issued by the State the annual inspection occurred between January 15 and March 1, with the following results:—

Places visited where cattle are kept	42
Dairy cows	169
Young stock	76
Bulls	10
Sheep	9
Swine	1,432

With a few exceptions the cattle were found healthy and the barns kept in a sanitary condition.

We were unfortunate in having an outbreak of glanders in horses during the year and two horses were condemned and killed. There were also two cases of rabies in dogs, both dogs being killed, and the diagnosis confirmed by the State authorities. At present I have under quarantine two dogs which had been associated with the condemned animals.

Two cows were killed suffering from tuberculosis, and the premises cleaned and disinfected, as required by the State.

I would suggest that our city have a proper place for the keeping of all animals quarantined within its borders, the expense of the upkeep of such to be paid for by the owners of the animals under quarantine. At present we are incurring too much risk of a rabid dog, for instance, breaking quarantine through no fault of the owner or his attendants. Such a place as a proper quarantine station could be used for other purposes when no animals are confined there.

Respectfully submitted,

HARRY LUKES,
Inspector of Animals.

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BOARD OF HEALTH

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ORGANIZATION OF HEALTH DEPARTMENT

BOARD OF HEALTH.

PHILIP V. ERARD, *Chairman.*
EDGAR H. GUILD, M.D. RICHARD A. ROCHFORD, M.D.

EDGAR H. GUILD, M.D.
Health Physician and Bacteriologist.

WILLIAM L. YOUNG,
Agent and Clerk.

GRACE E. WARREN, *Chief Clerk.*
MARY E. MACDONNELL, *Office Clerk.*
ANNA C. O'CONNELL, *Office Clerk.*
BELLE LYTLE, *Office Clerk.*
MARGARET E. GAFFNEY, *Department Nurse.*

SANITARY INSPECTORS.

JACOB R. SACKETT, *Chief.*
ALGER P. BLAINE,
JOHN J. BOLAND,
WILLIAM F. BOYLE,
WILLIAM J. HASSETT,
DANIEL J. MAHONEY,
HENRY WRIGHT.

INSPECTORS OF MILK.

STEPHEN C. DOWNS,
FRED L. ROBERTSON.

INSPECTOR OF VINEGAR.

STEPHEN C. DOWNS.

INSPECTOR OF ANIMALS, MEATS AND PROVISIONS.
INSPECTOR OF SLAUGHTERING.

HARRY LUKES, D.V.S.

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HEALTH DEPARTMENT HOSPITAL.

1414 State Street.

EDGAR H. GUILD, M.D., *Physician in Charge.*

CONSULTANTS.

EVERETT A. BATES, M.D.
DUDLEY CARLETON, M.D.

CONTAGIOUS DISEASES.

Visiting Physicians.

*ORLAND R. BLAIR, M.D.
LAURENCE D. CHAPIN, M.D.
HENRY RITTER, M.D.
CHARLES E. STREET, M.D.

TUBERCULOSIS.

PARKER M. CORT, M.D.
JOHN M. TRACY, M.D.
GEORGE L. WOODS, M.D.

Aurist and Laryngologist.
WILLIAM A. HARE, M.D.

Roentgenologist.
ERNEST L. DAVIS, M.D.

---

*ETHEL I. MINKLER, *Matron.*
ETHELYN M. LOUD, *Matron.*

MEDICAL INSPECTORS OF SCHOOLS.

EDGAR H. GUILD, M.D., *Director.*

WALTER H. CHAPIN, M.D.
WILLIAM A. R. CHAPIN, M.D.
JOSEPH N. BOYER, JR., M.D.
MICHAEL W. HARRINGTON, M.D.
JAMES P. HILLARD, M.D.
URGELE LABELLE, M.D.
CHARLES E. STREET, M.D.
JOHN M. MALONEY, M.D.
RALPH B. OBER, M.D.
JOHN E. OVERLANDER, M.D.
THOMAS F. REARDEN, M.D.
HENRY RITTER, M.D.
ALLEN G. RICE, M.D.
EDWARD J. SWEENEY, M.D.

*Resigned.

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SCHOOL NURSES.

ANNA M. CRAWFORD,
ALICE E. CRAWFORD,
MILDRED M. DAME,
MARY J. FOLEY,
KATHERINE G. HANNIGAN,
BERTHA W. MARTIN,
JENNIE M. ROURKE,
OLIVE STRATTON,
CECELIA M. SHEA.

CHILD WELFARE NURSE.

MARGUERITE ARMSTRONG.

DISPENSARY FOR TUBERCULOSIS.

137½ State Street.
EDGAR H. GUILD, M.D., *Director.*

DISPENSARY PHYSICIANS.

WALTER H. CHAPIN, M.D., *Chief of Clinic.*
ERNEST H. JUDD, M.D.

EDNA R. BIRDSALL, *Dispensary Nurse.*
ADALINE B. PERRY, *Clerk and Visitor.*

DENTAL CLINICS.

FRANK W. MOULTIS, D.D.S., *School Dentist.*
PAUL A. DONAHUE, D.D.S., *School Dentist.*
FORREST J. WHITTEMORE, D.D.S., *School Dentist.*
RUTH I. PERRIN, *Dentist's Assistant and Clinic Clerk.*
MARION G. VANDERPOOL, *Dentist's Assistant and Clinic Clerk.*
SYLVIA K. FULLER, *Dentist's Assistant and Clinic Clerk.*

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FORTIETH ANNUAL REPORT

OF THE

BOARD OF HEALTH

To His Honor, the Mayor, and the Members of the City Council.

GENTLEMEN:—The annual report of the Board of Health for the year ending December 31, 1921, is presented for your consideration and approval. The attention which is being given to the various aspects of Public Health work, by an ever increasing number of associations and organizations, indicates the important position which modern health department activities occupy in the economic and social welfare of the community.

The ultimate objects to be obtained by these various activities are the establishment of higher standards of health and the prolongation of human life. A general advance in the desired direction will come through the control and elimination of contagious disease, the prevention of unnecessary deaths, sickness, and ill health due to ignorance or disregard of the principles upon which good health depends. Housing conditions, water supply, sewerage systems, and purity of all food products also have important bearing on the improvement which will be made in the general health through a series of years.

The Vital Statistics present in figures the actual results obtained from year to year, but it is difficult to estimate in this manner the personal, educational, and constructive work, which is so prominent a feature in bringing about the results shown in the Vital Statistics. Realizing that correct living and observance of the laws of personal hygiene are matters of habit, and that the individual must recognize and assume a personal responsibility in obeying these laws, it very naturally follows that the great hope for definite advance in public health must be placed on the work of creating and developing a correct understanding of this responsibility. Child Welfare work in its various aspects offers a most promising field of effort. Medical supervision of schools, school nurses, dental clinics, nutrition classes for school children, clinics for children of pre-school age and babies, with suitable instruction to mothers as to

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the proper care and feeding of babies, represent the principal methods now being used in Child Welfare work. In other words, permanent improvement in the health of the community depends upon the work which is done in preparing those who are to become our future citizens to intelligently adopt those methods of living which insure good health and well-being.

Special attention has been given to malnutrition occurring in school children during the year, and the information obtained and results already accomplished furnish ample proof of the important position which nutrition occupies in growth and development. The work carried on by the school nurses has an influence for good far beyond that which can be expressed in words, and is made apparent through the relations established with parents, who realize the nature of the work performed and benefits received.

Hygiene of the mouth has acquired added importance from the fact now well established that defective teeth, tonsils, and adenoids afford an easy route by which infective agents gain admittance to the system. The work being done in correcting these defective conditions, through medical supervision and dental clinics, forms a most important division of Child Welfare work. A detailed account of the various activities connected with this division of the Health Department is contained in the body of the report and should receive careful consideration.

Each year brings new responsibilities and opportunities in caring for the public health and, although the mortality rate for the year is the lowest ever obtained, it should serve as an incentive to greater efforts in the future, and the next important development is, without doubt, in the extension of Child Welfare work. At the present time this work, as carried on by the Health Department, is confined to the children of school age. Initiative work of a most commendable nature has been instituted by the Visiting Nurse Association for children of pre-school age and with mothers and babies. The work has so increased in volume that it will be difficult for any private association to meet the financial requirements connected with the growth of the work through a series of years and it will be necessary for the Health Department to assume its larger development and management.

As the city increases in population, the expense of maintaining a progressive, efficient organization will naturally increase. The protection of the public health may well be treated as a business proposition, based on the value of human lives saved, estimated on productivity and earning capacity. Any estimate made from such a standpoint will demonstrate the absolute truth of the statement that the great and enduring asset of

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the city is found in the health of its inhabitants and whatever amounts may be expended in this direction could not be used to better advantage and will give returns of a most satisfactory nature.

TRANSACTIONS AND GENERAL WORK OF THE DEPARTMENT.

The Board of Health organized for the year by electing Philip V. Erard, chairman, and William L. Young, clerk. A complete list of the employees of the Department accompanies the report. Eighteen regular meetings and four special meetings were held during the year. Regulations governing the manufacture and bottling of non-alcoholic beverages were adopted by the Board and a fee of five dollars per year established for permits. Nine permits under the above regulations were granted.

During the year the following licenses were granted: 17 undertakers; 66 licenses to sell wood alcohol; 2 for day nurseries; 14 stable licenses, and 5 applicants were given leave to withdraw; 13 to practice manicuring, massage, and giving of vapor baths, and 2 applicants were given leave to withdraw. Seventeen sewer connections were ordered.

The following appointments were made: Forrest J. Whittemore, D.D.S., school dentist; Mary J. Foley and Mildred M. Dame, school nurses; John J. Boland, sanitary inspector. Dr. Harry Lukes was appointed inspector of slaughtering.

Plans for the establishment of 23 new bakeries were approved and 4 applicants given leave to withdraw. Five applications for licenses to conduct boarding houses for infants were approved. The regulations relating to the control of diseases dangerous to the public health were amended to include encephalitis lethargica in the list of diseases.

The general work of the Department carried on by the sanitary inspectors increased during the year as shown in the table summarizing the work performed. Each inspector is assigned to a separate district, and all sanitary inspections, investigations of contagious diseases, placarding, and disinfection of houses in that district, are under his special care. The familiarity and knowledge thus obtained add to efficiency and prevent much duplication of effort, and also encourage the inspector in making improvements from year to year in the general sanitary condition of the district under his charge.

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SUMMARY OF THE GENERAL WORK OF THE DEPARTMENT.

Complaints Investigated and Cause Removed.

Alleys, insanitary,	11
Animals, dead, not removed,	24
Animals, keeping of,	21
Ashes, rubbish, and garbage on ground,	133
Buildings, odor in,	21
Cellars, insanitary,	33
Cesspools,	24
Committing nuisance,	5
Complaints investigated, no cause found,	19
Contagious diseases, suspected cases,	10
Contagious diseases, failure to observe rules relative to,	45
Dumping grounds,	27
Fowls, keeping of,	52
Garbage, insanitary receptacle,	81
Halls and stairways, insanitary,	16
Milk, unclassified,	41
Plumbing, insanitary,	20
Provisions, poor quality,	12
Sewer drains, stoppage of,	16
Slops thrown on ground,	6
Stables,	21
Standing water, odor from,	8
Stores, insanitary,	14
Stores, refuse not removed,	23
Swine, keeping of,	7
Tenements, insanitary,	25
Unclassified,	71
Water closets, insanitary,	28
Water closets, without water,	26

SANITARY INSPECTIONS.

Classification.	Total Inspections.	Re-inspections.	First Notices.	Complied.	Pending.
Alleys,	2,374	566	489	480	9
Cellars,	1,061	101	77	77	0
Cesspools,	136	29	20	18	2
Dumps,	122	11	6	6	0
For enforcement of Polluted Water Regulations,	7	3	2	1	1
Garbage cans,	3,225	345	319	319	0
Hallways,	553	119	113	113	0
Poultry yards,	577	90	85	85	0
Plumbing, defective,	78	44	34	34	0
Sinks,	568	48	36	36	0
Stables,	714	106	92	89	3
Stores,	220	28	25	25	0
Vaults,	52	12	10	10	0
Water closets,	1,564	163	120	120	0
Yards,	37,911	1,620	1,504	1,485	19
Keeping fowls in tenements,	6	3	3	3	0
Dead animals on private property,	39	19	17	17	0
For enforcement of Common Cigar Cutter Regulation,	285	74	73	73	0
Miscellaneous,	840	142	125	125	0

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Scarlet fever cases investigated,	336
Diphtheria cases investigated,	249
Typhoid fever cases investigated,	11
Cerebro-spinal meningitis cases investigated,	3
Anterior poliomyelitis cases investigated,	8
Septic sore throat cases investigated,	2
Contagious diseases, suspected cases,	871
Visits to tuberculosis cases,	52
Visits to chicken pox cases,	5
Visits to placarded houses,	737
Visits to venereal disease cases,	9
Diphtheria swabs,	340
Histories (settlement),	226
Houses fumigated,	694
Rooms fumigated,	883
Specimens from suspected typhoid carrier,	2

Tenements.

Tenements inspected,	1,080
Tenements reinspected,	185
Tenements with dark rooms,	3
Tenements in need of repairs,	50
Water closets poorly ventilated,	10
Water closets poorly lighted,	19
Damp cellars,	2
Number defects found and notices given,	145
Number pending,	0
Number complied with,	145

Defects and nuisances remedied.

Tenements needing cleaning,	21
Hallways needing cleaning,	12
Rubbish in cellars,	25
Water closets defective,	27
Set tubs defective,	6
Water closets needing cleaning,	25
Sinks needing cleaning,	9
Sinks defective,	14
Filth on piazza,	5
Fowls kept in cellar,	1

Miscellaneous.

Inspections,	57,418
Reinspections,	4,197
Total inspections,	61,615
Verbal notices,	3,878
Written notices,	117
Notices served,	82
Nuisances abated by Board of Health, expense charged to owners,	7
Stable licenses granted,	14
Stable licenses revoked,	0
Given leave to withdraw,	5
Undertakers' licenses granted,	17
Licenses granted to practice manicuring, massage, and giving of vapor baths,	13
Given leave to withdraw,	2

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Licenses to deal in denatured or wood alcohol,	66
Day nursery licenses,	2
Orders to connect premises with public sewer,	17
New bakeries registered,	21
Prosecutions,	1
Convictions,	1
Fines,	$2.00

NUMBER OF INSPECTIONS AND ACTION TAKEN TO REGULATE CERTAIN BUSINESS ESTABLISHMENTS.

CLASSIFICATION.	Number.	Inspections.	Written Notices.	Verbal Notices.	To Whitewash.	For Alterations.	Notices to Clean.	Other Notices.	Complied with.	Pending.
Bakeries,	157	664	9	430	8	140	102	189	400	39
Bakery Salesrooms,	12	32	..	..	..	..	..	..	..	..
Restaurants,	151	1021	..	167	2	14	122	29	166	1
Candy Manufactories,	16	46	..	13	..	4	8	1	12	1
Ice Cream Plants,	47	147	..	43	3	12	23	5	41	2
Soda Fountains and Ice Cream Salesrooms,	227	579	..	70	..	2	53	15	70	..
Soda Bottling Plants,	11	66	..	22	..	13	4	5	16	6
Barber Shops,	132	372	..	63	..	2	51	10	63	..
Theaters,	12	21	..	..	..	..	..	..	..	..
Infant Boarding Houses,	6	8	..	..	..	..	..	..	..	..
Cafe Restaurants,	5	35	..	10	..	..	10	..	10	..
Hotel Kitchens,	4	15	..	4	..	1	3	..	4	..
Potato Chip Establishments,	2	7	..	..	..	..	..	..	..	..
Peanut Products Establishment,	1	2	..	..	..	..	..	..	..	..
Ice Cream Cone Manufactories,	2	2	..	..	..	..	..	..	..	..
Spaghetti Manufactory,	1	2	..	..	..	..	..	..	..	..

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HEALTH DEPARTMENT NURSE.

Special attention and care of the inflammatory affections of the eyes of infants, visits to cases of contagious disease, and Child Welfare work in conjunction with the Child Welfare nurse, have occupied the time of the Department nurse.

The following cases were investigated and treatment secured: Ophthalmia neonatorum, 7; suppurative conjunctivitis, 10; inflamed eyes, 19; suppurating eye, including 6 cases from the previous year, all of which were discharged cured, excepting one case under treatment at the end of the year. Eighteen cases of suspected scarlet fever were investigated and referred to physicians. Three cases of trachoma are under observation. Visits made during the year include 607 for nursing and general care; 129 for instructions; 39 follow-up work; 47 to physicians' offices; 9 to hospitals and dispensaries. The Board of Health is required by statute to investigate all reported cases of eye infections and institute such care and treatment as may be required, and the undoubted saving of eyesight alone in some of these infections fully repays for the time given to the work.

DISEASES DANGEROUS TO THE PUBLIC HEALTH.

The statutes require that all diseases classified as dangerous to the public health shall be reported to the local Board of Health. Encephalitis lethargica has been added to the list during the year. The control or eradication of these diseases depends upon the co-operation of the individual, who must assume a portion of the responsibility necessary in preventing the transmission of disease occurring in his own family to other persons, and if every person would strictly obey the rules and regulations of the Department and personally assume this responsibility, the control and even eradication of this class of diseases would soon be accomplished. Unrecognized and unreported cases are a continual source for dissemination of infection and many cases occur where no precautions have been taken whatever in preventing others from contracting the disease. Quarantine of the entire family has been abolished and isolation of the patient substituted. During the year a public explanation and demonstration of the Schick Test for susceptibility to diphtheria was given by the Director of the State Health Department Laboratories. The test should be given to all children over six years of age and those who respond to the test should be made immune by the use of toxin-antitoxin. All children under six years of age respond to the test, and should be

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immunized. The immunity established is of a permanent nature. The immunity established for typhoid fever by the use of typhoid vaccine was well illustrated during the war. The eradication of smallpox by vaccination has been absolutely demonstrated. Other diseases will, no doubt, be successfully controlled in this manner, but the individual can at all times protect himself if he so desires and realizes his obligations to others.

TUBERCULOSIS.

196 *(209) cases of tuberculosis were reported during the year,—169 (189) pulmonary and 27 (20) all other forms. There were 73 (80) deaths from pulmonary tuberculosis and 29 (20) from all other forms. The death rate for the year is .75 (.77) per one thousand population. At the present time tuberculosis occupies the fifth place in diseases causing death, but the persistent efforts which are being made in preventing its development, with the care and attention given to all active cases, offer every encouragement for the belief that all the various measures employed in the campaign will eventually be crowned with success and that the next decade of effort will bring results of a most gratifying nature.

DIPHTHERIA.

249 (143) cases of diphtheria were reported during the year, with 22 (10) resident deaths, giving a case mortality of 8.839% (6.99%). There were 28 laryngeal, 18 nasal, and 2 ear infections. 27 (13) secondary infections occurred. 65 (26) gave a history of contact with other cases; 7 (5) were imported cases; 4 (5) made visits outside the city within the incubation period, and in 16 cases the source of the infection could not be determined. 146 cases or 58.6% of the total number reported occurred in school children. This percentage of cases occurring in the schools from year to year remains about the same. Some 20,000 children are attending school, and in the work of preventing the occurrence of diphtheria, 340 swabs were taken during the year by the nurses from children who had in any way been exposed to those having diphtheria. No doubt this has served to limit the number of cases and provide an effective method of control.

SCARLET FEVER.

336 (464) cases of scarlet fever were reported during the year, with 1 (18) resident death. 83 (26) secondary infections occurred; 84 (118)

*Figures in parenthesis indicate corresponding number 1920.

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outside the city. 5 (11) made visits outside the city during the incubation period and in 161 (207) cases the source of infection could not be discovered. 185 (257) cases occurred in the public schools. The type of infection has again become mild in nature and, as in other diseases, the necessary isolation has been difficult to maintain.

TYPHOID FEVER.

The practical elimination of typhoid fever illustrates the value of efficient supervision of the milk and water supply. Of the 11 cases reported during the year, 5 were contracted away from home. 2 secondary cases occurred. 1 made visit outside the city within 30 days previous to date of illness, and in 3 cases the source of infection was not obtained. 2 resident deaths occurred, giving a case mortality of 18.18% (30.76%).

OTHER DISEASES DANGEROUS TO THE PUBLIC HEALTH.

8 (3) cases of anterior poliomyelitis were reported during the year with no deaths; 3 (5) cases of cerebro-spinal meningitis, with 2 resident deaths. Of the milder infections, there were 146 (1,124) cases of measles, with 2 (13) deaths; whooping cough, 111 (411), with 3 (19) deaths. 65 (74) cases of infectious diseases of the eyes of infants were reported, all of which were investigated and received such care as was required by the Department nurse. The decrease in the number of cases of eruptive diseases is quite marked. Diphtheria is the only contagious disease showing an increase, and this increase has been general throughout the country.

*Figures in parenthesis indicate corresponding number 1920.

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TABLE SHOWING DEATH RATE OF TUBERCULOSIS FROM 1890, ESTIMATED ON POPULATION.

YEAR	POPULATION	DEATHS	RATE
1890	*44,179	114	2.58
1895	*51,522	97	1.88
1900	*62,059	111	1.78
1901	64,412	122	1.96
1902	66,854	111	1.66
1903	69,389	114	1.64
1904	72,020	123	1.7
1905	*73,540	120	1.63
1906	76,255	116	1.52
1907	78,707	114	1.44
1908	81,425	91	1.11
1909	84,237	101	1.19
1910	*88,926	87	.97
1911	92,048	101	1.09
1912	96,973	101	1.04
1913	100,877	99	.98
1914	104,949	109	1.03
1915	*102,971	101	.98
1916	106,365	91	.85
1917	117,058	124	1.059
1918	124,409	152	1.221
1919	127,441	112	.878
1920	*129,614	100	.77
1921	135,877	102	.75

*Official census.

DEATHS FROM TUBERCULOSIS—1921.
(Pulmonary)
BY WARDS AND MONTHS.

Wards.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
1	..	1	2	1	2	2	..	..	..	1	..	..	9
2	3	2	1	2	2	..	1	..	1	..	..	1	13
3	..	1	..	1	1	..	1	1	..	1	..	2	8
4	..	..	1	1	..	1	..	1	1	2	..	..	7
5	..	2	1	1	1	..	1	..	1	..	..	..	7
6	..	..	..	1	..	1	1	1	..	..	2	1	7
7	..	..	2	1	..	..	..	1	..	1	..	..	5
8	1	1	2	1	..	1	2	..	1	1	..	1	11
Non-residents	1	..	..	1	..	..	1	..	1	..	..	2	6
Totals	5	7	9	10	6	5	7	4	5	6	2	7	78

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TABLE SHOWING REPORTED CASES AND DEATHS OF COMMUNICABLE DISEASES BY YEARS WITH POPULATION.

Diseases.	1916 106,365		1917 117,058		1918 124,400		1919 127,441		1920 *129,614		1921 135,877	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Actinomycosis	...	...	...	...	...	...	...	...	...	...	...	...
Anterior Poliomyelitis	87	22	10	8	4	...	2	...	8	1	8	...
Anthrax	...	...	...	...	...	1	...	...	...	...	...	...
Cerebro - Spinal Meningitis	4	3	10	7	5	5	2	3	5	4	3	4
Chicken Pox	126	...	251	...	163	...	299	...	185	...	297	...
Diphtheria	176	18	453	64	227	31	140	25	143	16	249	23
Dog-bite (requiring anti-rabic treatment)	...	...	...	...	...	...	...	...	...	...	1	...
Dysentery:—												
a. Amebic	...	...	...	...	...	...	...	...	...	...	...	...
b. Bacillary	...	...	...	...	...	...	...	...	1	1	...	...
‡Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	3	1
German Measles	25	...	722	...	168	...	24	...	25	...	18	...
Glanders	...	...	1	1	...	...	...	...	...	...	...	...
Inflamed Eyes (not specific)	...	...	...	...	...	...	...	..	47	...	50	...
Ophthalmia Neonatorum	64	...	57	...	70	...	47	...	19	...	8	...
Suppurative Conjunctivitis	2	...	...	...	3	...	4	...	6	...	6	...
Trachoma	...	...	...	...	2	...	...	...	2	...	1	...
†Influenza	...	...	...	...	7110	614	776	120	533	70	...	...
Leprosy	...	...	1	...	...	...	...	...	...	...	...	...
Malaria	3	...	...	...	1	...	1	...	...	...	...	...
Measles	1293	14	531	6	990	13	40	2	1124	13	146	4
Mumps	198	1	201	...	398	...	26	...	153	...	148	...
Pellagra	1	1	...	...	...	...	...	...	...	...	...	...
§Pneumonia (Lobar)	...	...	84	124	852	182	247	77	229	56	145	59
Rabies	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	240	3	366	6	139	3	176	3	464	18	336	2
Septic Sore Throat	1	4	3	2	1	...	1	1	...	...	2	...
Smallpox	...	...	1	...	...	...	3	...	...	...	...	...
Tetanus	1	1	3	...	1	...	...	...	...	...	1	1
Trichinosis	3	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis:												
Pulmonary	152	66	203	100	179	124	148	93	189	80	169	75
All other	26	25	37	24	39	28	35	19	20	20	27	21
Typhoid Fever	30	5	55	7	29	4	22	6	13	6	11	6
Whooping Cough	132	2	105	3	299	36	149	3	411	19	111	3
Yellow Fever	...	...	...	...	...	...	...	...	...	...	...	...
Totals	2514	165	3094	352	10,682	432	2142	352	3572	304	1740	214

*Official census.

†Reportable since October 4, 1918.

‡Reportable since March 1, 1921.

§Reportable since May 14, 1917.

(Non-resident deaths included in above.)

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TABLE SHOWING REPORTED CASES OF COMMUNICABLE DISEASES BY MONTHS—1921.

Diseases.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Actinomycosis,...	..	..	..	..	..	..	..	..	..	..	..	..	...
Anterior Poliomyelitis,.....	1	..	..	..	..	..	1	4	..	1	..	1	8
Anthrax,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Asiatic Cholera,..	..	..	..	..	..	..	..	..	..	..	..	..	...
Cerebro - Spinal Meningitis,.....	..	..	1	..	..	..	..	1	..	..	..	1	3
Chicken Pox,....	59	86	76	84	17	15	8	3	3	7	22	17	297
Diphtheria,.....	24	16	14	11	27	11	12	11	21	34	43	25	249
Dog-bite (requiring anti-rabic treatment),.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Dysentery:—													
a. Amebic,...	..	..	..	..	..	..	..	..	..	..	..	..	...
b. Bacillary,..	..	..	..	..	..	..	..	..	..	..	..	..	...
Encephalitis Lethargica,.....	..	..	2	..	..	1	..	..	..	..	..	..	3
German Measles,.	4	2	1	..	2	1	1	1	1	1	..	4	18
Glanders,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Hookworm Disease,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Inflamed Eyes (not specific),..	5	3	10	2	5	2	4	2	5	2	4	6	50
Ophthalmia Neonatorum,.....	1	1	1	..	1	1	..	1	2	..	..	..	8
Suppurative Conjunctivitis,.....	1	..	4	..	..	..	..	..	..	..	..	1	6
Trachoma,.....	..	..	..	..	..	..	..	..	..	..	..	1	1
Influenza,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Leprosy,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Malaria,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Measles,.....	16	33	35	16	2	6	10	2	1	2	6	17	146
Mumps,.....	7	10	25	27	13	46	6	4	..	1	4	5	148
Pellagra,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Plague,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Pneumonia (lobar)	15	13	17	20	12	17	8	8	4	7	14	20	145
Rabies,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Scarlet Fever,....	97	33	36	30	18	14	9	12	18	23	23	28	336
Septic Sore Throat,	..	..	..	..	1	..	..	1	..	..	..	..	2
Smallpox,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Tetanus,.....	..	..	..	..	..	..	..	..	..	..	1	..	1
Trichinosis,.....	..	..	..	..	..	..	..	..	..	..	..	..	...
Tuberculosis:—													
Pulmonary,....	13	12	23	16	7	16	14	10	10	18	13	17	169
Other Forms,..	3	3	..	3	5	..	..	3	1	3	2	4	27
Typhoid Fever,...	..	..	..	1	1	1	2	3	2	1	..	..	11
Typhus Fever,...	..	..	..	..	..	..	..	..	..	..	..	..	...
Whooping Cough,	31	10	15	10	4	10	10	5	11	3	2	..	111
Yellow Fever,....	..	..	..	..	..	..	..	..	..	..	..	..	...
Totals,.....	278	172	260	170	115	141	80	66	74	103	184	147	1,740

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TABLE SHOWING REPORTED CASES OF COMMUNICABLE DISEASES, 1921, BY WARDS.

Diseases.	Wards.								
	1	2	3	4	5	6	7	8	Totals
Actinomycosis,	..	..	..	..	..	..	..	..	....
Anterior Poliomyelitis,	1	1	..	1	..	..	1	4	8
Anthrax,	..	..	..	..	..	..	..	..	....
Asiatic Cholera,	..	..	..	..	..	..	..	..	....
Cerebro-spinal Meningitis,	..	..	..	1	..	..	2	..	3
Chicken Pox,	35	57	27	28	15	52	28	55	297
Diphtheria,	33	70	13	27	11	20	8	67	249
Dog-bite (requiring anti-rabic treatment),	..	..	..	..	..	..	1	..	1
Dysentery:									
a. Amebic,	..	..	..	..	..	..	..	..	....
b. Bacillary,	..	..	..	..	..	..	..	..	....
Encephalitis Lethargica,	..	..	1	..	..	..	2	..	3
German Measles,	2	2	..	1	2	2	5	4	18
Glanders,	..	..	..	..	..	..	..	..	....
Hookworm Disease,	..	..	..	..	..	..	..	..	....
Inflamed Eyes (not specific),	6	10	3	11	3	4	6	7	50
Ophthalmia Neonatorum,	..	3	1	1	..	1	..	2	8
Suppurative Conjunctivitis,	..	1	..	..	2	1	1	1	6
Trachoma,	..	..	..	..	1	..	..	..	1
Influenza,	..	..	..	..	..	..	..	..	....
Leprosy,	..	..	..	..	..	..	..	..	....
Malaria,	..	..	..	..	..	..	..	..	....
Measles,	13	5	9	9	12	19	62	17	146
Mumps,	24	19	7	39	23	6	7	23	148
Pellagra,	..	..	..	..	..	..	..	..	....
Plague,	..	..	..	..	..	..	..	..	....
Pneumonia (Lobar),	16	18	28	12	17	21	12	21	145
Rabies,	..	..	..	..	..	..	..	..	....
Scarlet Fever,	41	51	7	41	20	20	62	94	336
Septic Sore Throat,	1	..	1	..	..	..	..	..	2
Smallpox,	..	..	..	..	..	..	..	..	....
Tetanus,	..	..	..	1	..	..	..	..	1
Trichinosis,	..	..	..	..	..	..	..	..	....
Tuberculosis:—									
Pulmonary,	21	41	18	18	14	21	17	24	169
All other,	1	7	4	3	3	2	2	5	27
Typhoid Fever,	2	2	..	..	..	..	4	3	11
Typhus Fever,	..	..	..	..	..	..	..	..	....
Whooping Cough,	14	8	14	11	14	20	17	13	111
Yellow Fever,	..	..	..	..	..	..	..	..	....
Totals,	210	295	133	199	187	189	237	340	1,740

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TABLE SHOWING REPORTED CASES OF COMMUNICABLE DISEASES BY AGE PERIODS AND SEX, 1921.

Ages.	Under 1 year		1–4		5–9		10–14		15–19		20–24		25–34		35–44		45–54		55–64		65–74		75–84		Over 85		Total		Total Cases
Sex.	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Diseases.																													
Actinomycosis,																													
Anterior Poliomyelitis,			3		2	2					1																6	2	8
Anthrax,																													
Asiatic Cholera,																													
Cerebro-Spinal Meningitis,				2		1																						3	3
Chicken Pox,	4	10	40	38	79	95	10	8	2	1		2	3	4	1												139	158	297
Diphtheria,			32	35	59	60	12	24	2	1	2	8	1	5	2	4	1	1									111	138	249
Dog-bite (requiring anti-rabic treatment),																	1										1		1
Dysentery:—																													
a. Amebic,																													
b. Bacillary,																													
Encephalitis Lethargica,								2						1														3	3
German Measles,	1	1	4	3	5	4																					10	8	18
Glanders,																													
Hookworm Disease,																													
Inflamed Eyes (not specific),	25	21	3	1																							28	22	50
Ophthalmia Neonatorum,	3	4	1																								4	4	8
Suppurative Conjunctivitis,	1	1	1		1	1							1														4	2	6
Trachoma,										1																		1	1
Influenza,																													
Leprosy,																													
Malaria,																													
Measles,	8	5	28	16	32	44	5	1	2	2		2			1												76	70	146
Mumps,			11	9	37	48	12	13		2	1	4	4	6			1										66	82	148
Pellagra,																													
Plague,																													
Pneumonia (Lobar),	6	2	7	7	11	10	3	4	4	3		4	10	12	8	6	16	7	8	5	2	5	2	1		2	77	68	145
Rabies,																													
Scarlet Fever,	2		44	35	81	68	13	42	8	18	1	8	5	8	1	2											155	181	336
Septic Sore Throat,							1							1													1	1	2
Smallpox,																													
Tetanus,					1																						1		1
Trichinosis,																													
Tuberculosis:—																													
Pulmonary,	1				1		4	6	3	15	11	15	31	24	15	17	9	4	5	2	5			1			85	84	169
Other Forms,	3	1	4	4	2	1	2			1	2		3		1		1	1				1					18	9	27
Typhoid Fever,						1	1	1	2	2						2	1				1						5	6	11
Typhus Fever,																													
Whooping Cough,	13	5	21	25	17	23		7																			51	60	111
Yellow Fever,																													
Totals,	67	50	199	175	328	358	68	108	23	46	18	43	58	61	29	31	30	13	18	7	8	6	2	2		2	838	902	1740

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HEALTH DEPARTMENT HOSPITAL.

The facilities of the hospital in caring for contagious diseases have been extended to the surrounding towns, as in previous years, but the tuberculosis wards are restricted to patients living in the city, and have been utilized to their full capacity. The closing of the State Sanitorium at Westfield for admission of adult cases has caused an extra demand upon the hospital, and produced a situation in Western Massachusetts which the State should remedy as soon as possible by providing such accommodations as will obviate the necessity of sending patients to any great and inconvenient distance from home and friends.

234 *(282) patients were admitted to the different wards of the hospital during the year,—56 (64) to the tubercular wards and 178 (218) to the contagious disease wards. A diminution in the contagious wards was due to the falling off in the number of cases in the city and the mild nature of the infection as a rule. The increased average duration of treatment of those admitted to the tuberculosis ward explains the slight decrease in the number admitted. The admissions for diphtheria were 30.5% (35%) of the total number of cases reported, and of scarlet fever 27.6% (27.8%) of the total number of scarlet fever cases reported. 11 deaths occurred in the diphtheria ward, all laryngeal cases. No deaths occurred from scarlet fever or other contagious diseases. 22 deaths occurred from tuberculosis. Most of the tubercular cases admitted are in such condition that little improvement can be expected, and the case mortality will always be large.

The hospital is an important factor in the management and control of diseases dangerous to the public health, and with the increasing number of people who cannot receive the necessary treatment at home when sick, its facilities must be enlarged to provide for the demands which are being made by physicians as well as patients.

Miss Ethel I. Minkler, who was connected with the hospital for 12 years, serving four years as a nurse in the contagious wards and eight years as matron, resigned early in the year. The faithful and highly efficient service rendered during this time is deserving of special mention. The personal interest displayed and never failing courtesy maintained under all circumstances will long be remembered by patients and employees.

*Figures in parenthesis indicate corresponding number 1920.

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CONTAGIOUS DISEASE WARDS.

1921.

Number of patients in hospital December 31, 1920,	23
Number of patients admitted during the year,	178
Number of intubations for diphtheria,	16
Number of deaths following intubation,	6
Number of private patients admitted during the year,	50
Number of physicians treating private patients,	30
Total number of days for diphtheria patients,	1,300
Average number of days for diphtheria patients,	17.1
Total number of days for scarlet fever patients,	3,924
Average number of days for scarlet fever patients,	42.1
Total number of days for other diseases,	240
Total number of days for all diseases,	5,464
Number of deaths from diphtheria,	11
Number of deaths from scarlet fever,	0
Number of deaths from other diseases,	0
Total number of deaths from all diseases,	11

PATIENTS ADMITTED BY MONTHS.

1921.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Diphtheria,	6	8	5	8	7	5	1	8	13	10	9	6	76
Scarlet Fever,	12	4	12	11	7	4	3	6	7	10	5	12	93
Ophthalmia Neonatorum,	..	..	..	1	1	1	..	..	..	..	..	..	3
Others,	1	..	..	..	..	..	..	..	..	..	..	..	1
Mixed Infections,	..	..	..	..	..	..	..	..	1	..	..	..	1
Anterior Poliomyelitis,	..	..	..	..	..	1	..	..	..	..	..	..	1
Measles,	..	..	..	2	..	..	1	..	..	..	..	..	3
Totals,	19	7	17	17	15	11	5	14	21	20	14	18	178

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AGE OF PATIENTS.
1921.

Age.	Under 1		1–4		5–9		10–19		20–29		30–39		40–49		Over 50		Totals
Sex.	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Diphtheria,.....	1	..	14	11	17	12	5	5	1	6	2	2	..	..	..	..	76
Scarlet Fever,.....	..	..	11	6	16	17	9	22	1	6	1	3	..	1	..	..	93
Ophthalmia Neonatorum,.....	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Others,.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Mixed Infections,....	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Anterior Poliomyelitis,.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Measles,.....	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Totals,.....	6	1	26	17	33	29	16	27	2	12	3	5	..	1	..	..	178

TUBERCULOSIS WARDS.
1921.

Number of patients in the hospital December 31, 1920,.....	22
Number of patients admitted during the year,.....	56
Number discharged, with disease arrested,.....	1
Number discharged, improved,.....	8
Number discharged, condition not improved,,.....	9
Number transferred to other institutions,.....	7
Number discharged for refusal to obey hospital rules,.....	1
Number of deaths,.....	22
Total number of days for patients,.....	8,386
Average number of days per patient,.....	149.7
Number condition improving December 31, 1921,.....	8
Number condition not improving,.....	22
Number of patients in hospital December 31, 1921,.....	30

AGE OF PATIENTS.
1921.

Age.	Under 1		1–4		5–9		10–19		20–29		30–39		40–49		Over 50		Total
Sex.	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Tuberculosis,.....	..	..	..	..	..	..	..	11	4	3	7	12	5	3	9	2	56

PATIENTS ADMITTED BY MONTHS.
1921.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Tuberculosis,.....	5	4	7	7	2	7	4	5	4	5	3	3	56

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DISPENSARY FOR TUBERCULOSIS.

The Health Department dispensary is the central agency for all efforts undertaken by the Department in controlling this disease. Records are on file of all reported cases, giving a definite knowledge of the conditions surrounding the patient, and if not under definite medical care, such supervision is maintained as will afford the best opportunity for recovery or prevention of further advance of the disease. Clinics are held three times weekly for diagnosis of suspected cases and for the observation of cases under the supervision of the nurses. Many patients are so careless and indifferent regarding their condition that it is difficult at times to maintain the optimistic attitude necessary for the efforts which are required in gaining results. The dispensary has been utilized by the Massachusetts Department of Public Health the second Tuesday in each month during the year for examination of patients in Springfield and the surrounding towns upon a written request from their physicians. Specialists in diseases of the lungs are present and the nurses at the dispensary furnish their services as needed.

DISPENSARY FOR TUBERCULOSIS.

Report for year 1921.

Number new patients,		122
Number not tubercular,		90
Number visits to dispensary, new and old patients,		274
Number patients under supervision during year,		367
Number patients under supervision December 31, 1921,		134
Number positive sputum examinations,		6
Number negative sputum examinations,		36
Number first visits made at home,	Nurse,	185
	Visitor,	177
Number subsequent visits made at homes,	Nurse,	817
	Visitor,	790
Number visited unable to attend clinic,	Nurse,	114
	Visitor,	144
Number visits made on above,	Nurse,	372
	Visitor,	365
Total visits,	Nurse,	1,374
	Visitor,	1,332
Number patients improving,		8
Number patients not improving,		126
Number of dispensary patients admitted to Health Department hospital,		37
Number of dispensary patients admitted to other hospitals,		44
Number of patients returned from above, reporting to dispensary,		48
Number moved out of town (not to sanitarium or hospital),		15
Number deaths of dispensary patients,		87
Number arrested cases,		3

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LABORATORIES.

The usual routine work of the laboratories in the diagnosis of diphtheria, tuberculosis, typhoid fever, and ophthalmia neonatorum has been carried on as usual, and the amount of work performed is shown in the tables. This work, in addition to the facilities furnished for sending specimens to the State Health Department laboratories, enables physicians to utilize to any desired extent the diagnostic aid which these examinations furnish. The various outfits used for collecting material for these examinations are always available. Diphtheria antitoxin, typhoid vaccine, anti-meningitis serum, nitrate of silver solution, vaccine for smallpox, serum for the Schick test, and toxin-antitoxin for diphtheria immunization are furnished without charge to physicians. All positive results of cultures for diphtheria made from swabs received until 9 P. M. are telephoned to physicians the following morning, Sundays and holidays included. Negative results and reports of all other examinations are sent by mail. It is becoming the practice of physicians to use an initial injection of antitoxin in all cases of suspected diphtheria, and this procedure should be generally adopted, as no danger ensues from one such injection, and, if the culture is positive, at least 12 hours have been gained in the treatment.

The total number of examinations made during the year were 2,222 (1,706), divided as follows: Diphtheria 1,818 (1,295), tuberculosis 352 (376), typhoid fever 28 (35), and ophthalmia neonatorum 24. The percentage of positive results obtained compares most favorably with published results of many other laboratories and indicates the care which is exercised in the operation of the laboratories. The work performed in the milk laboratory is taken up under Food Inspection.

DIPHTHERIA.

MONTH.	DIAGNOSIS.		RELEASE.		TOTAL Examinations.
	Positive.	Negative.	Positive.	Negative.	
January,	25	129	2	39	195
February,	15	88	12	51	166
March,	11	85	2	25	123
April,	11	47	..	19	77
May,	22	68	6	53	144
June,	10	62	5	26	103
July,	12	32	7	30	82
August,	3	21	2	16	42
September,	24	88	1	17	125
October,	37	122	..	82	241
November,	41	175	6	96	318
December,	21	129	2	50	202
Totals,	232	1,037	45	504	1,818

Positive 18.2%.

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TYPHOID FEVER.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Positive,..	..	..	..	..	..	..	..	..	..	1	..	..	1
Negative,..	5	3	..	2	2	4	..	2	3	4	1	2	28
Doubtful,..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals,....	5	3	..	2	2	4	..	2	3	5	1	2	29

TUBERCULOSIS.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Positive,...	8	14	2	11	2	9	6	10	7	6	12	5	92
Not found,.	26	25	23	22	27	10	19	31	12	20	35	10	260
Totals,....	34	39	25	33	29	19	25	41	19	26	47	15	352

Positive 26.1%.

INFANT MORTALITY.

244 (292) deaths occurred of children under one year of age during the year. Reference to the tables of infant mortality shows the various affections and diseases causing death and the duration of life in days, weeks, and months. 105 (120) died during the first week, 32 (37) in the next three weeks, making 135 deaths in the first month, or more than one half of the total mortality. These deaths were chiefly due to malformations, debility, and premature births. During the year there were 6 (14) deaths from acute bronchitis, 22 (18) deaths from broncho-pneumonia, 6 (3) deaths from pneumonia, 36 (46) deaths from diarrhœa and enteritis, caused by improper diet and feeding, and 2 (12) from whooping cough. The figures for the year and those in parentheses for the preceding year show the reduction in infant mortality and should encourage all who are engaged in this special line of work to persevere and enlarge their efforts. The available living birth returns are 3,600 (3,580), which gives an infant mortality rate of 67.77% (80.79%) per 1000 births. 148 (122) stillbirths occurred. Of the 36 deaths from diarrhœa and enteritis, 28 (39) were bottle-fed babies, 6 (6) breast-fed, and 2 (3) mixed feedings.

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INFANT MORTALITY—1921.

Months.	Total Under 1 year	AGES.										
		Under 1 day	1-2 days	2-3 days	3 days 1 week	1-2 weeks	2-3 weeks	3 weeks 1 month	1-2 months	2-3 months	3-6 months	6-9 months	9-12 months
January	20	4	2	1	2	2	1	1	1	1	3	2	0
February	19	3	0	1	1	3	1	1	1	2	5	1	0
March	27	5	1	0	4	2	3	0	2	1	6	1	2
April	21	4	2	0	3	3	0	0	1	2	2	2	2
May	14	4	3	0	2	1	0	1	0	0	0	0	3
June	20	6	0	2	4	2	0	0	2	1	0	3	0
July	15	3	1	0	0	1	0	0	0	3	3	2	2
August	32	10	1	0	1	0	1	2	2	3	6	5	1
September	20	3	2	1	2	0	2	0	1	1	2	4	2
October	19	4	3	1	0	1	0	1	2	0	3	2	2
November	18	4	0	1	1	2	0	0	2	0	1	1	6
December	19	5	2	1	3	0	0	1	0	2	3	2	0
Totals	244	55	17	8	23	17	8	7	14	16	34	25	20
Males	135	34	8	4	13	9	6	4	7	9	17	14	10
Females	109	21	9	4	10	8	2	3	7	7	17	11	10
Totals	244	55	17	8	23	17	8	7	14	16	34	25	20
Classification.													
Measles	1	..	..	..	..	..	..	..	..	..	..	..	1
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	2	..	..	..	..	..	..	..	..	..	1	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza	1	..	..	..	..	..	..	..	..	..	1	..	..
Tuberculosis (Pul.)	1	..	..	..	..	..	..	..	..	..	1	..	..
Syphilis	1	..	1	..	..	..	..	..	..	..	..	..	..
Anterior Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis	6	..	..	..	..	2	..	..	1	1	..	..	2
Broncho-Pneumonia	22	..	..	..	1	1	..	1	2	1	6	4	6
Pneumonia	6	..	..	..	..	..	..	..	1	1	2	1	1
Diarrhœa and Enteritis	36	..	..	..	..	1	..	..	4	6	7	13	5
Congenital Malformations	34	6	3	1	3	3	1	3	2	3	7	..	2
Congenital Debility	11	1	..	..	1	..	1	1	2	3	2	..	..
Premature	74	39	10	4	8	5	5	1	2	..	..	..	..
Other Diseases	49	9	3	3	10	5	1	1	..	1	7	6	3
Totals	244	55	17	8	23	17	8	7	14	16	34	25	20

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INFANT MORTALITY RATE.

Years.	Births excepting stillbirths.	Deaths under 1 year.	Rate deaths per 1000 births.	Death rate per 1000 population.	Per cent of total deaths.
1911	2,582	250	96.82	2.71	17.70
1912	2,876	282	98.05	2.90	19.51
1913	2,964	295	99.52	2.92	20.15
1914	3,077	284	92.29	2.70	18.67
1915	3,268	276	84.45	2.68	18.26
1916	3,453	311	90.00	2.92	17.86
1917	3,703	325	87.76	2.77	17.42
1918	3,876	407	105.00	3.26	15.92
1919	3,398	273	80.34	2.14	15.64
1920	3,580	292	81.56	2.25	17.08
1921	*3,600	244	67.77	1.79	15.83

*Estimated.

INFANT MORTALITY—1921.

Maternal Nativity and Ward Residence.

Nativity of Mother.	WARDS.									
	1	2	3	4	5	6	7	8	Non-Resident.	Totals
Massachusetts	12	18	3	8	7	6	8	15	12	84
Other States	5	5	7	10	5	8	9	11	9	64
Armenia	..	..	..	..	..	..	..	1	1	2
Austria	..	1	..	..	..	..	..	4	2	7
Belgium	..	..	..	..	..	..	1	..	..	1
Canada	1	1	1	4	..	..	1	4	2	14
England	..	..	1	..	..	..	..	..	..	1
France	..	1	..	..	..	..	..	1	..	2
Germany	..	..	..	..	..	..	..	1	..	1
Greece	..	2	..	..	1	..	..	..	..	3
Ireland	..	6	1	1	..	..	..	3	..	11
Italy	..	..	10	4	..	6	..	1	3	24
Lithuania	..	1	..	..	..	..	..	..	..	1
Nova Scotia	..	..	..	..	1	..	..	1	..	2
Poland	..	1	..	..	..	..	..	..	2	3
Prince Edward Island	..	..	..	..	..	..	1	..	..	1
Russia	1	11	..	..	..	..	1	..	..	13
Scotland	1	1	..	1	..	1	..	..	..	4
Sweden	1	..	1	..	..	..	1	..	..	3
Syria	..	1	..	..	..	..	..	1	..	2
Unknown	..	..	..	..	..	..	..	1	..	1
Totals	21	44	24	28	14	17	21	44	31	244

MEDICAL SUPERVISION OF SCHOOLS.

Medical inspection of school children in Massachusetts was made obligatory by legislative act of 1906, this work having been inaugurated by the Board of Health previously, the act providing that it should remain under their control if so desired. During the interval of fifteen

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years, medical inspection has developed and enlarged from a modest beginning until at the present time it has become the most important division of Health Department activities. 13 physicians are employed, devoting the necessary time to the work of physical inspection and examination. 10 school nurses are employed full time in the varied duties which have developed in following up the defective conditions which are found by the inspectors, and taking such measures as may be necessary in having these impediments to healthy growth treated. 4 dental clinics have been established for treating defective teeth, and teaching children the value of sound teeth in maintaining health. 11 nutrition classes are in operation in the different schools, giving especial attention to children 10 pounds or more underweight. School lunches have been introduced in schools where most needed. Home Helpers' leagues, composed of girls of suitable age, have been formed, where talks and instructions are given as to personal hygiene and care of the body and sanitation in the home. When it is called to mind that children of school age constitute at least one sixth of the entire population of the city and that four fifths of these children have defective conditions of different kinds, mostly, however, of a curable nature, the unlimited opportunity for Child Welfare work in its various aspects compels serious attention. School officials at the present time fully realize the influence which good health bears on mental development, and physical education and training occupy a definite position in all public school instruction. The co-operation existing between the school department and the Board of Health in enlarging and carrying on the work of medical supervision affords every incentive for its continuation in such direction and manner as may be necessary to produce the desired results.

GENERAL YEARLY INSPECTION OF SCHOOL CHILDREN.

1921.

Number of pupils examined,	16,563
Number of pupils reported with no defects,	4,899
Number of pupils reported with nervous affection,	164
Cardiac diseases reported valvular,	204
Orthopedic defects reported,	129
Enlarged glands (tubercular),	22
Tuberculosis,	1
Defective teeth,	7,585
Enlarged tonsils,	5,041
Adenoids,	4,651

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LIST OF DISEASES REFERRED TO MEDICAL INSPECTORS OF SCHOOLS FOR INSPECTION AND DIAGNOSIS TABULATED FROM WEEKLY REPORTS FOR YEAR ENDING DECEMBER 31, 1921.

	1920	1921
I.—Infectious Diseases.		
Diphtheria,	8	5
Scarlet Fever,	8	10
Measles	21	44
Mumps,	47	64
Whooping Cough,	19	30
Chicken Pox,	36	118
Tuberculosis,	0	0
Influenza,	0	0
Other Diseases,	3	3
II.—Diseases of Oral and Respiratory Tract.		
Acute Pharyngitis,	171	186
Acute Tonsilitis,	196	258
Chronic Hypertrophic Tonsils,	562	454
Acute Rhinitis,	180	157
Defective Nasal Breathing,	62	40
Adenoids,	198	234
Other Diseases,	155	108
III.—Diseases of Eye and Ear.		
Acute Otitis Media,	10	20
Chronic Otitis Media,	23	43
Other Diseases of Ear (defective hearing excluded),	18	17
Blepharitis,	45	206
Acute Conjunctivitis,	83	142
Other Diseases of Eye (defective visions excluded),	151	88
IV.—Diseases of the Skin.		
Acne,	9	22
Boils,	63	167
Dermatitis,	122	260
Eczema,	135	123
Erythema,	41	28
Herpes,	185	235
Impetigo Contagiosa,	736	1,116
Pediculosis,	516	867
Scabies,	81	477
Tinea,	21	85
Other Affections,	338	280
V.—Miscellaneous.		
Abscesses and Ulcers,	197	225
Contusions and Injuries,	846	1,233
Cardiac Diseases,	9	18
Fever,	92	61
Gastric and Intestinal,	97	122
Pulmonary Diseases,	27	19
Tubercular Lymph Nodes,	9	1
Other Diseases not Classified,	1,516	2,155
Malnutrition,	12	25
Summary.		
Specific and Infectious Diseases,	142	274
Oral and Respiratory Diseases,	1,524	1,437
Diseases of the Ear,	51	80
Diseases of the Eye,	279	436

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	1920	1921
Diseases of the Skin,	2,247	3,660
Miscellaneous Diseases,	1,289	1,704
Unclassified,	1,516	2,155
No diseases found,	1,464	1,229
Number of first examinations,	8,512	10,966
Number of re-examinations,	6,632	6,998
Total number of examinations,	15,144	17,964
Vaccinations,	2,056	2,186
Total number sent home,	371	530

SCHOOL NURSES.

Ten nurses devote their full time to the work of medical supervision of schools. The information obtained from the medical inspection of children forms the basis of the work carried on. It includes the notification of parents of the defective condition found, with conferences and arrangements for their treatment. Through the efforts of the nurses, enlarged and diseased tonsils were removed from 1,235 children and adenoids from 1,059 children. 711 children were fitted with glasses during the year for defective vision. Regular examination of children by rooms for the presence of parasitic affections, with subsequent treatment and temporary removal of children from school having symptoms of contagious infections, consume much time. During the yearly examination of school children, now required by law, the nurses are in attendance and assist the medical inspectors. The amount of work is constantly increasing and the enlargement of the malnutrition work has added to their various duties. So much time is required for weighing and measuring the height of all the children that the nurses have found it impossible to do this work thoroughly without neglecting other duties equally important. The school officials, through the physical director, have most kindly offered to take over this work, so that in the future this essential information will be available when needed. No better demonstration of public health nursing can be given than is furnished by the work of the school nurses, and the tables stating the amount and variety of work performed during the year are especially interesting, as they show the results actually obtained and the continual oversight which is required in securing these results.

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REPORT OF SCHOOL NURSES FOR THE YEAR ENDING DECEMBER 31, 1921.

	No.	Cured.	Under Observation.	Refused Treatment.	Other Care Moved.
Skin Diseases,.....	3,734	3,687	39		8
Parasitic Affections,.....	2,338	2,284	47		7
Chronic Enlarged Tonsils,..	3,802	1,235	2,177	18	372
Adenoids,.....	3,329	1,059	1,913	10	347
Defective Vision,.....	1,154	711	435	2	6
Other Eye Affections,.....	1,097	1,096	1		
Defective Hearing,.....	77	57	18		2
Tuberculous Disease,.....	5	3	1		1
Heart Disease,.....	234	98	114		22
Orthopedic,.....	136	31	105		
Defective Teeth, etc.,.....	3,583	1,290	2,202	10	81
Miscellaneous,.....	9,495	9,405	45		45
Totals,.....	28,984	20,956	7,097	40	891

New cases visited,.....	4,298
Total visits, new and old,.....	9,156
Total treatments at homes,.....	955
Total treatments at school,.....	23,512
Inspections (school),.....	23,171
First aid and dressings (school),.....	8,933
Visits to M. D., Hospital, etc.,.....	538
Exclusions, Communicable diseases,.....	130
Whooping Cough,.....	49
Mumps,.....	84
Scarlet Fever,.....	17
Diphtheria,.....	27
Chicken Pox,.....	95
Pink Eye,.....	18
Measles,.....	17
Pneumonia,.....	5
Acute Tuberculosis,.....	8
Scabies,.....	6
Children operated on in Boston,.....	4
Glasses changed,.....	11
Calls, Open-Air School,.....	50
Appendix removed,.....	2
Mastoid,.....	1
Pediculosis,.....	119
Impetigo,.....	1
Fever,.....	14
Tonsilitis,.....	3
Acute Conjunctivitis,.....	16
Diphtheria Carriers,.....	2
Suspicious Scarlet Fever,.....	2

CHILD WELFARE.

In addition to the work already mentioned, 11 nutrition classes, under the direction of the Child Welfare nurse, have been formed during the year. The school nurses attend to the details of the work in their respective schools and the Child Welfare nurse gives talks and demonstrations. 1,051 children have been selected for special attention. The standard established for normal growth and development is based on the weight,

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height, and age, and 5% below weight for height and age is looked upon as evidence of under-nourishment. The under-nourished child is not confined to any class or nationality and the condition is not by any means always caused by lack of sufficient food. At the present time children 10 pounds or more underweight are being selected for special attention and the results obtained are very encouraging, at least 80% of the children having shown satisfactory increase in weight. The greatest single increase in two months was 13 pounds and the greatest number of pounds underweight on admission was 40 pounds. In addition to improper diet other causes of malnutrition are found in decayed teeth, diseased tonsils and adenoids, and defective vision. Insufficient sleep, late hours, an undue amount of exercise, are also factors in bringing about the condition. When the special combination of causes is removed, the improvement in weight begins and a gradual return to the normal condition may be expected. The removal of various obstacles to normal growth and development requires patience and persistent effort, as it is not an easy task in many cases to obtain the co-operation of the parent. 468 children have already been treated for the various defects found and 87 have been discharged with normal weight. 126 meetings for talks and instructions of the classes, with 965 visits to the homes, have been made during the year, and the results already obtained give every encouragement for the extension of the work to include all children who are 5% underweight.

HOME HELPERS' LEAGUE.

The leagues in the different schools carried on their special work during the summer months under the direction of the school nurses. The weekly meetings were devoted to talks and demonstrations on the care of the baby, personal hygiene, and topics of special interest to the members, who are girls of suitable age to be benefited by information, which will not only be useful in their own home, but in the future as well. So much interest in the objects of the league have been shown that some of them have continued their meetings during the remainder of the year.

DENTAL DISPENSARIES.

The preservation and care of the teeth are now considered essential features of Child Welfare work. The first clinic was opened in 1918 at the Howard Street School. Three additional clinics have been established since that time,—one at Hooker Street School, which is utilized by the schools at the North End district; another at the Homer Street School, for the children in that portion of the city, and a clinic for the Indian Orchard schools. 3,688 children have received treatment since

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the opening of the clinics. The amount of work performed during the year is given in the following table, and when it is taken into consideration from the yearly physical examinations that nearly one half of the children attending the public schools have defective teeth, the necessity for the work is apparent. Children in the first three grades receive especial attention, in order that the habit of caring for the teeth may be formed as early as possible and before the eruption of the permanent teeth. Children whose parents are unable to consult a dentist have received the greater share of attention, but the facilities of the clinic are available for any child whose parents may desire, as the work is not in any sense of a charitable nature.

SUMMARY OF WORK PERFORMED AT DENTAL DISPENSARIES.

	1920	1921
Total cases to date,	2,017	3,688
Number of new cases during the year,	1,211	1,842
Returns,	1,163	1,855
Number discharged,	1,238	2,205
Number dropped,	14	23
Number cleaning (cases),	1,015	1,560
Number of extractions teeth (temporary),	2,962	4,263
Number of extractions teeth (permanent),	2,144	562
Number of treatments,	2,709	864
Number of fillings (temporary),	355	550
Number of fillings (permanent),	520	1,006
Abscesses,	302	954
Gas,	105	65
Local anæsthetic,	2,413	2,453
Hours at clinic (dentists),	646	1,736
Hours at clinic (assistants),	617	2,231
Visits at homes (assistants),	209	1,091
Talks and demonstrations (assistants),	262	208

FOOD INSPECTION.

Milk.

The production of milk at the dairies, its collection, transportation to the dealer, with subsequent handling and delivery to the consumer, afford abundant opportunity for contamination and adulteration. Definite knowledge of and supervision over the various interests engaged in the production and handling of this valuable food product are essential and the regulations governing the production, care, and sale of milk must be rigidly enforced if the standard for quality and purity is to be maintained. Changes are continually being made by dealers in the source of supply as well as by those who sell milk either in stores or by delivery to houses. The dairies sending milk to Springfield change ownership and require special attention, as many new owners are not familiar with the methods and equipment required by the regulations. 71,600 quarts of milk are sold daily and 7,000 quarts of cream. This milk is obtained

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from 982 dairies, 212 being located in New York and Vermont. At the present time very little raw or loose milk is sold in the city. There is, however, 400 quarts of certified milk and about 1,200 quarts of special milk from tuberculin tested cows used daily, which is not pasteurized, but bottled at the dairies under the most careful supervision. The general adoption of pasteurization by the dealers, with mechanical handling and delivery in bottles, has added greatly to the safety of milk and practically eliminates all danger of disease germs being transmitted in this manner. All cases of communicable diseases are reported to the milk inspector. The source of the milk supply is immediately investigated. No cases of this class of diseases have been in any way connected with the milk supply during the year.

Ten additional dealers have installed pasteurizing plants; 2 have remodeled their present equipment; 3 dealers have discontinued business during the year, and 7 have sold out to other dealers.

The summary of the work performed in the milk division, which includes the work of the laboratory, shows the improvement made in the quality of the milk, and is especially indicated in the increased percentages of milk with lower bacterial counts.

SUMMARY OF WORK PERFORMED IN THE DAIRY DIVISION.

	1920.	1921.
Estimated number of quarts sold daily in Springfield,	71,100	71,600
Estimated number of quarts sold daily in city from near-by dairies,	51,600	53,200
Estimated number of quarts sold daily in city from New York and Vermont dairies,	19,500	18,400
Estimated number of quarts of cream sold daily,	6,000	7,000
Number of licenses issued for sale of milk	807	898
Number of licenses issued for sale of oleomargarin,	303	226
Number of near-by dairies sending milk to Springfield,	751	770
Number of New York and Vermont dairies sending milk to Springfield,	300	212
Number of changes made by dealers in source of supply,	247	300
Number of dairy milk houses built,	35	30
Number of dairy barns built,	6	2
Number of barns remodeled,	10	7
Number of milk plants remodeled,		12
Number of inspections made of dairies,	618	692
Number of inspections made of stores and restaurants,	500	1,369
Number of inspections made of milk wagons and rooms,	510	329
Number of inspections made (total),	1,628	2,390
Number of samples collected at milk plants,	1,275	1,815
Number of samples collected at stores and restaurants,	93	311
Number of samples collected from wagons,	352	404
Number of samples brought to laboratory,	377	823
Number above Massachusetts standard,	1,589	2,596
Number below Massachusetts standard,	586	757
Number below standard in solids and fats,	272	390
Number below in solids,	586	757
Number below in fats,	272	390

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	1920	1921
Number of samples analyzed (total),	2,175	3,353
Number of samples plated for bacteria count,	369	245
Number of refractions for added water,	40	15
Number of samples containing added water,	38	10
Number of samples having bad flavor,	52	102
Number of slimy milk and cream samples,	9	6
Number of bitter milk samples received and examined,	7	3
Number of samples showing skimming,	55	93
Number of protein examinations,	38	60
Number of butter samples examined,	10	9
Number of sediment tests for dirty milk,	413	308
Number of cows tested for producers,	110	225
Number of cards and notices,	1,007	1,319
Number of samples of vinegar analyzed,	53	30
Number below in acid,	12	13

SUMMARY OF MILK BACTERIA COUNTS.

	1920		1921	
Number of samples with 10,000 and under,	137	37.1%	115	46.9%
Number of samples between 10,000 and 20,000,	43	11.6%	25	10.2%
Number of samples between 20,000 and 50,000,	60	16.2%	40	16.3%
Number of samples between 50,000 and 100,000,	38	10.3%	27	11.0%
Number of samples between 100,000 and 200,000,	34	9.2%	14	5.7%
Number of samples between 200,000 and 500,000,	23	6.2%	11	4.5%
Number with not more than 10,000,	137	37.1%	115	46.9%
Number with not more than 100,000,	278	75.3%	207	84.5%
Number with not more than 500,000,	335	90.8%	232	94.7%

ICE CREAM ANALYSIS.

	1920	1921
Number of samples taken,	86	142
Number of wholesale dealers,	9	15
Number of dealers who purchase ice cream,	35	30
Number of dealers who manufacture ice cream,	34	36
Number of samples above standard,	83	140
Number of samples below standard,	3	2
Highest per cent of fat,	16. %	22.50%
Lowest per cent of fat,	6.75%	5.%
Average per cent of fat,	10.95%	13.12%

MEAT AND PROVISIONS.

The inspector of meats and provisions makes an inspection of all markets selling meats and provisions every two weeks. Larger markets are inspected three times weekly and all wholesale houses once a week.

The following places were inspected:—

Cold storage houses,	15
Wholesale meat houses,	53
Wholesale fruit houses,	71
Retail meat stores,	469
Retail grocery stores,	555
Retail fish stores,	308
Retail fruit stores,	463

The floors in 14 stores were not kept clean and complaint was made of 12 stores being in an unsanitary condition.

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During the year the following list of meats, fruits, fish, and vegetables, given in pounds, was condemned and destroyed:—

Meats.

Beef,.....	53 lbs.	Ham,.....	80 lbs.
Corned Beef,.....	130 lbs.	Veal,.....	2 lbs.
Lamb,.....	73 lbs.	Kidney,.....	3 lbs.
Pork,.....	18 lbs.	Bologna,.....	2 lbs.

Fruits.

23 melons — 6 watermelons — 1 box apples — 1 box pears

Vegetables.

1 box cabbage — ½ bushel peas — ½ box cauliflower — ½ box rhubarb

Fish.

480 pounds herring in tomato sauce

Canned Goods.

51	2-lb. cans of apples	
5	20-lb. cans of sliced pineapple	
105	6-lb. cans corned beef	681½ lbs. corned beef
13	1½-lb. cans corned beef	
31	1-lb. cans corned beef	
36	2-lb. cans corned beef hash	226½ lbs. corned beef hash
144	1-lb. cans corned beef hash	
7	1½-lb. cans corned beef hash	
16	2-lb. cans roast beef	83 lbs. roast beef
4	6-lb. cans roast beef	
27	1-lb. cans roast beef	
15	12-lb. cans bacon	180 lbs. bacon
3	2-lb. cans sausage	
3	6-lb. cans tomatoes	
1	2-lb. cans apricots	
41	7-lb. cans of cheese	
8	2-lb. cans of jam	
28	1-lb. cans of pork and beans	
2	7-lb. cans stew	
2	cans of sardines	
2	cans of malted milk	
2	cans of mixed pickles	

The majority of these canned goods was found in Army Supply stores.

SLAUGHTERING INSPECTION.

The carcasses of 142 hogs and 7 veal were examined; 1 hog was condemned for tuberculosis, and carcass rendered. In making the examination the Inspector drove 1,852 miles. A municipal slaughter house, where all slaughtering could be done under sanitary condition, is strongly advised by the inspector.

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VITAL STATISTICS.

The tables distributed throughout the report, relating to the occurrence of disease and the comprehensive tables of registered mortality, offer a fund of information regarding the progress which is made in the work of protecting the public health, thereby reducing mortality rates, with consequent prolongation of life. The census bureau estimate of the population for 1921 is 135,877. There were 1,504 (1,709) deaths, making the gross mortality rate 11.34% (13.18%) per 1,000 population. There were 270 (249) non-resident deaths, which makes the actual mortality rate 9.30% (11.26%) per 1,000 population; in other words, 205 less deaths, with an increase of 6,263 in population. This is the lowest mortality rate on record for the city and unequaled by few cities in the same population class. A comparison of the deaths during the year from 14 principal diseases, with the average for the previous five years, shows a decline in all except heart disease. 90 less deaths occurred from communicable diseases during the year than in 1920, due chiefly to the absence of influenza and the lessened mortality from deaths from all communicable diseases during the year, which is less than one fifth of the total mortality. Pneumonia and tuberculosis are now included in this class of diseases.

The mortality tables of the year show that the diseases causing the largest number of deaths are heart disease, Bright's disease, cancer, apoplexy, tuberculosis, and pneumonia in the order named. Deaths from traumatism of various kinds follow next in the number of fatalities. 81 (92) deaths were caused by accidents: Motor cars 23 (19); railroads 5 (4); accidental inhalation of illuminating gas 3 (4); deaths by falling 18 (23); burns 9 (14); drowning 11 (7); miscellaneous 12 (19). The infant mortality for the year shows a decrease. 213 (264) resident deaths occurred in children under one year of age. The ratio existing between the birth rate, marriage rate, and death rate per 1,000 population also gives every assurance of normal growth, and should be regarded with much satisfaction, the birth rate being 20.49%, the death rate 11.24%, and the marriage rate 11.03% per 1,000 population, or 2,059 more births than deaths. Reduction in mortality rates from the systemic and degenerative diseases of middle age should be accomplished through the preventive and educational work which is being so generally employed and developed. This work, as carried on during the early period of life, will be of especial value in preventing the onset of this class of diseases which so often have their beginning during these years.

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BIRTHS, DEATHS, STILLBIRTHS, AND MARRIAGES WITH POPULATION AND RATES PER 1,000 POPULATION.

Years	Population	Births, Stillbirths excluded	Deaths, Stillbirths excluded	Stillbirths	Marriages	Birth Rate	Death Rate	Marriage Rate
1900	*62,059	1,562	1,143	49	640	25.16	18.41	10.31
1901	64,412	1,527	933	49	642	23.73	14.48	9.96
1902	66,854	1,681	1,025	49	701	25.14	15.33	10.48
1903	69,389	1,758	1,100	53	726	25.33	15.85	10.46
1904	72,020	1,682	1,149	72	686	23.35	15.95	9.52
1905	*73,540	1,879	1,120	71	800	25.55	15.22	10.87
1906	76,255	1,863	1,136	69	934	24.43	14.89	12.24
1907	78,707	2,061	1,302	63	1,156	26.18	16.54	14.68
1908	81,425	2,219	1,334	82	943	27.25	15.03	11.58
1909	84,237	2,371	1,309	65	1,064	28.14	15.53	12.63
1910	*88,926	2,562	1,481	94	1,170	28.81	16.65	13.15
1911	92,048	2,582	1,412	104	1,274	28.05	15.33	13.84
1912	96,973	2,876	1,445	95	1,147	29.65	14.90	11.82
1913	100,877	2,964	1,464	100	1,260	29.38	14.51	12.49
1914	104,949	3,077	1,521	146	1,226	30.71	14.49	11.68
1915	*102,971	3,268	1,511	115	1,185	31.73	14.67	11.50
1916	106,365	3,453	1,741	131	1,554	32.46	16.36	14.61
1917	117,058	3,703	1,865	159	1,680	31.63	15.93	14.35
1918	124,409	3,876	2,555	176	1,372	31.15	20.53	11.02
1919	127,441	3,398	1,745	148	1,606	26.66	13.69	12.60
1920	*129,614	3,580	1,709	122	1,901	27.62	13.18	14.66
1921	135,877	**3,600	1,541	148	1,500	26.49	11.34	11.03

*Official. **Estimated

COMPARISON OF DEATHS FROM PRINCIPAL DISEASES IN PERCENTAGES PER 1,000 POPULATION, BY YEARS.

	1916	1917	1918	1919	1920	Average 1916-1920 inc.	1921
Anterior Poliomyelitis,....	.206	.068	.000	.000	.007	.056	.000
Apoplexy,.....	.967	.854	.955	.909	.941	.925	.824
Bright's Disease (chronic),	1.763	1.383	1.429	1,340	1.381	1.459	1.037
Cancer,.....	1.099	1.007	.971	1.042	.980	1.019	.993
Diphtheria,.....	.169	.546	.248	.196	.123	.256	.169
Diabetes,.....	.253	.239	.160	.141	.239	.206	.176
Enteritis (under 2 years),.	.798	.734	.666	.478	.424	.620	.279
Heart Disease,.....	1.691	1.819	1.766	1.144	1.458	1.575	1.589
Measles,.....	.131	.051	.104	.015	.100	.080	.029
Pneumonia,.....	1.249	1.059	1.461	.603	.432	.960	.434
Scarlet Fever,.....	.028	.051	.024	.023	.138	.052	.014
Tuberculosis (pulmonary),	.620	.854	.995	.729	.617	.763	.537
Typhoid Fever,.....	.046	.049	.032	.047	.046	.044	.044
Whooping Cough,.....	.018	.025	.289	.023	.146	.100	.022
Suicides,.....	.150	.093	.056	.133	.077	.101	.139
Traumatism,.....	.629	.649	.441	.548	.455	.544	.397
Homicides,.....	.056	.042	.032	.047	.069	.049	.066

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TABLE SHOWING MORTALITY IN PERCENTAGES PER 1,000 INHABITANTS FOR ALL DISEASES AT DIFFERENT AGE PERIODS, BY YEARS.

Age Period	YEARS.						
	1916	1917	1918	1919	1920	Average 1916–1920 inc.	1921
Under 1	2.922	2.775	3.268	2.140	2.253	2.671	1.795
1	.638	.538	.706	.407	.463	.550	.264
2	.187	.204	.369	.211	.185	.231	.139
3	.216	.145	.216	.133	.154	.172	.147
4	.131	.128	.200	.101	.123	.136	.095
5–9	.338	.649	.465	.344	.277	.414	.294
10–14	.225	.316	.216	.141	.208	.221	.183
15–19	.300	.239	.586	.297	.216	.327	.228
20–29	1.061	1.246	2.890	1.176	.933	1.461	.662
30–39	1.569	1.332	2.947	1.364	1.049	1.652	.772
40–49	1.475	1.665	1.702	1.458	1.288	1.517	1.169
50–59	1.616	1.725	1.846	1.646	1.466	1.659	1.302
60–69	2.461	1.964	1.951	1.748	1.790	1.982	1.714
70–79	2.067	1.802	1.943	1.630	1.551	1.798	1.655
Over 80	1.146	1.195	1.204	.878	1.227	1.130	.912

(Non-resident deaths included in above tables.)

Respectfully submitted,

PHILIP V. ERARD,
EDGAR H. GUILD, M.D.,
RICHARD A. ROCHFORD, M.D.,
Board of Health.

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CITY PLANNING BOARD

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REPORT

OF

CITY PLANNING BOARD

SPRINGFIELD, MASS., December 29, 1921.

Honorable City Council, Springfield, Mass.

GENTLEMEN:—The first meeting of the Planning Board was held upon April first, the date set for its organization, since which time thirty-four meetings have been held.

It appeared to the board that, to properly carry out the work for which it was created, advisors and a working force would be needed, and the city government responded generously to the board's request for funds to carry out a program of work for the balance of the fiscal year.

After a study of conditions in other cities where city planning work had been carried on for periods of from one to ten years, and after consultation with various men versed in city planning, the board sent out to four highly recommended city planners a questionnaire (see Appendix "A") as to ideas, costs, time requirements, etc., for the execution of a comprehensive city plan, and, after careful study and expert advice, engaged two firms, The Technical Advisory Corporation of New York and Olmsted Bros. of Brookline, to prepare a comprehensive plan of the city with accompanying reports and to give their services as consultants in all matters pertaining thereto.

An examination of the proposed work necessary for the accomplishing of results made it evident to the board that chief stress should be laid on three fundamental factors in the city's life: (1) housing and its restrictions through zoning for residential, industrial, or commercial uses; (2) inter-city transport, i.e., streets, highways, and vehicular traffic, either private or public, and (3) railway service.

In addition to these three fundamental points in the preparation of the city plan, the board has to some extent studied, as far as possible in the limited time allotted to it, a few "emergency" problems presented to it, and reported upon them.

Upon the three main questions, as noted above, the board can, at the present time, report progress as follows:

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Referring to (1) (see Appendix "B") Zoning or Housing: The Sanborn Insurance maps, Vols. I, II, III, including 284 sheets, have been checked in the field. The sheets showed the approximate location of each structure on its lot, and the relative area occupied, together with the character of the building (wood, brick, concrete, etc.), height in stories, and the general use (dwelling, garage, store, factory, etc.). The field men checked the facts indicated upon the sheets, adding such details as were necessary in connection with zoning and street work. Such notes included the number of families occupying the structure, the type of merchandise handled in a store, the sizes of yards, the street improvements, topographical conditions, and all other matters necessary in connection with the work. A total of 7.3 square miles out of a net area of 33.2 square miles (including lands under water in the rivers and Forest Park) was covered by these Atlas sheets. Other maps were provided which covered the balance of the territory. An average of four men with a supervisor was employed for approximately eight weeks, the total aggregating 1,264 hours. This investigation is estimated to have covered 21,771 buildings, 24,321 plots, and that the men traversed 325 miles of streets.

Meantime an examination was made of the building permits which had been issued for structures erected from Jan. 1, 1916, to Nov. 16, 1921. This work covered 2,470 structures with relation to which the following information was collected as far as was obtainable: The month the permit was issued, the street name, the house number, the principal material of construction, the roof material, the ground floor dimensions, the height in stories and in feet, the size of yards, the proposed use of the building, and its estimated cost. For the year 1921, a map was prepared showing the location of each building constructed and by symbols the intended use. Studies have also been commenced of land values, the work being concentrated upon those parts of the city which had valuations of $10 and upward, and of districts for some blocks on each side of certain sections of the Boston & Albany railroad and the Highland Division of the New York, New Haven & Hartford railroad.

A base map drawn at a scale of 400 feet to an inch was prepared for eventual use in making the zoning maps and for the preservation of data of various incidental kinds. The topographic contour sheets, so far prepared for the comprehensive topographic map of the city in course of preparation in the office of the engineer of Streets and Engineering, were secured, and a 400′ scale topographic map is being prepared to be used in connection with zoning studies. Land valuation maps have been made at a scale of 1″ to 600′, including the business section, and along the lines of the three railroads within the city's limits.

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A population map showing the distribution of population in 1900, 1910, and 1920 is being made. Sixty-nine sheets showing building tendencies from 1916 to date, "new building construction" map for 1921 at a scale of 1" to 600', and a "Frontage use" map, at the same scale, of the entire city are also completed.

Work is now being carried on upon maps which show the present conditions and use of all buildings in the city; the size of such buildings, both ground area and cubage; their location upon the lots, thereby indicating the size of the yards and courts and set-backs from the street line.

As will be seen from the above, the preliminary work, both field work and office work needed for the preparation of zoning plan and the compiling of sufficient data to draft the zoning ordinance, is of great magnitude. There now remains to be done, under this item, the preparation of the zoning maps and the drafting, after a thorough study of the material in hand, of a zoning ordinance for submission to the city. It is hoped that this will be ready within two months.

Referring to Item 2 (see Appendix "C") Streets and Thoroughfares: Twelve hundred tally sheets showing the vehicular and pedestrian traffic at various hours of the day have been completed, these tally sheets showing the movement of all classes of vehicles, including those of public service corporations, throughout the city. These tally sheets represent observation at sixty-eight corner points within the city limit, the observations being for ten hour periods and in some cases, as on Main street, observations were made for twenty-four hour periods. A special series of ten hour observations, running for an entire week, were made on Main street. These tally sheets have been checked and tabulated by students of the High School of Commerce under the direction of Miss Alma P. Davis.

The study of street railway traffic has been carried out in a similar manner, 261 tally sheets having been obtained which have been diagramed by Technical High School students under the direction of Prof. C. L. Thorndike. This study includes the route of the car, car number, capacity, place of stop, time of stop, time of start, passengers on, passengers off, cash fares, transfers, average haul, average load, average standing load, region of densest travel, and speed of travel at all times. Maps have been prepared showing all trolly routes, which, in connection with the population and use maps, will make it possible to study intelligently possible extensions, rescheduling of routes, etc. Maps have been prepared showing the auto parking distribution in Main and Dwight streets districts, diagrams showing speed rates upon the main streets, and small groups of photographs have been taken at thirty second intervals between 8.30 A. M. and 4 P. M. showing traffic on both Main and Dwight streets.

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Real estate valuations are now being made for various possible new streets and a complete list and map of all street alterations and widenings, either considered, recommended, or carried out from 1917 to the present time, has been made. A map at a scale of 1″ to 400′ showing all private and unimproved streets in the city has been completed.

Referring to Item 3: A tally of all Railroad Traffic, passenger and freight, of equal comprehensiveness and detail, as of the local street traffic, has been made and tabulated. An enormous amount of data concerning the historical development of the railroads has been collected showing the change and new developments in the railroad systems and the city's growth as affected thereby for a period of over sixty years. A complete and full map of all railroad properties at the scale of 1″ to 600′ has been made; a map showing the distribution of all freight received in Springfield is completed; charts showing the relation of train service as related to the city's population, and train service as related to the population of other cities, have been prepared, in addition to a large number of profile maps on or adjacent to the present steam railway lines, and full maps showing assessed valuation of all properties owned by or adjacent to the railroads.

The board's work in connection with so-called "emergency" problems has consisted in reporting to the City Property Committee, (a) (see Appendix "D") upon the advisability of a schoolhouse site in the vicinity of the junction of Sumner avenue and Allen street; (b) (see Appendix "E") the advisability of the use of city-owned land south of West street, as a City Athletic Field, and in a report to the Fire Commissioners, as to whether or not their proposed location for a new headquarters station would interfere with any plans the board might have in the future major street development. In addition to these, the board, at an early period in its work, realized the serious need of an ordinance to prevent the unrestricted building of business structures in residential districts.

The board realized also that to attempt to provide such restrictions, previous to the adoption by the City Council of a full and thoroughly studied zoning ordinance, was a difficult matter, both because an ordinance of a general nature might, in some instances, work hardships upon certain individuals and because of the difficulty of providing legislation which would be held of a reasonable nature by the courts. After several months of study and consultation, it presented, on October 3, an ordinance (see Appendix "F") which appeared to the board and its advisors to meet the situation, and this ordinance was enacted by the City Council on December 9, after a public hearing, as prescribed by statute.

From the work thus far performed by its advisors in the preparation

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of a comprehensive city plan with its attendant detail, the board is satisfied that its choice, in its advisors, was a wise one, and it will be seen from the foregoing that in the three months since the board's advisors began work the foundations have been laid and the fundamental work of the three main points accomplished. It now remains to carry to completion, by the development of this work, the constructive program which will result in the definite recommendations of the board in detail; of changes in streets, highways, traffic, railroad locations, park and recreation grounds, boulevard systems, river front improvement, and, last but not least, a comprehensive zoning ordinance, and the board respectfully recommends to the city government that a sufficient sum of money be appropriated to enable it to complete the work now under way.

The board wishes to express its thanks to the various departments in the city government and to the public service corporations of the city for their varied and live interest in the work thus far performed and the very great aid which has been rendered to the board and its advisors by them. Its particular thanks are also due to the City Council for their co-operation and the spirit of helpfulness which such co-operation always inspires.

Respectfully submitted,

G. C. GARDNER, *Chairman.*

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APPENDIX "A"

June 18, 1921.

MR. JOHN NOLEN, Harvard Square, Cambridge, Mass.

Dear Sir:—The Planning Board of the City of Springfield, appointed April 1 of this year, under a mandatory ordinance (copy herewith), is desirous of getting an early start in the preparation of a comprehensive city plan and zoning ordinance.

The board, recognizing the necessity of employing capable expert assistance, is confronted not with a multiplicity of experts it is true, but after careful consideration of work accomplished by well-known men and organizations, there remain three or four outstanding.

The board has therefore decided that in order to learn more of the availability of such experts for Springfield, it will ask each to furnish in the form of a preliminary report:

(a) An analysis of Springfield's shortcomings.
(b) Their idea of the three most pressing problems.
(c) Their tentative idea for the solving of the above.
(d) An outline of what the final Springfield City Plan Report should cover.
(e) Estimated cost of preparing a plan and zoning ordinance based upon (d).
(f) Whether or not collaboration of two or more specialists in zoning, railroad transportation, street transportation, etc., would appear desirable, and your willingness to take general charge of the work provided such collaboration were decided upon by the board.
(g) Schedule of data necessary for the preparation of the final city plan, indicating how much of this data can be collected by local agencies and what is best collected by the city planning specialists.

The above report to be made from a personal survey of at least three days and to be fully paid for by the sum of Three Hundred ($300) Dollars.

For the assistance of the expert in formulating such tentative suggestions, the board is prepared to furnish copies of the following:

A Map, scale 1 to 800, indicating

1. All streets.
2. Parks and playgrounds.
3. Steam and electric transportation lines.
4. Schools and public buildings.
5. Grades at important street intersections.

We would also like to know the probable personnel of the organization which you would employ on this particular work, understanding that this would be subject to revision.

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Will you be kind enough to inform the board promptly if you will submit such a report and state two or three dates in the near future which would best suit your convenience for the necessary visit.

Awaiting an early reply,

Yours respectfully,

SPRINGFIELD PLANNING BOARD,
H. B. HOPSON, *Secretary.*

HBH:FG
Also sent to:
Technical Advisory Corporation, N. Y. City.
Morris Knowles, Inc., Pittsburgh, Pa.
Olmsted Bros., Brookline, Mass.

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APPENDIX "B"

Springfield, Mass., December 21, 1921.

MR. G. C. GARDNER, Chairman, City Planning Board, Springfield, Mass.

Dear Sir:—The preliminary report submitted to you under date of July 13, 1921, suggested Zoning as the most important of the three most pressing problems which were believed to confront Springfield.

The unrestricted erection of factories, stores, apartments, and various types of residences in all parts of the city constituted a menace and created a problem to be first attacked by a scientific study of the conditions as they existed. This was to be done by a comprehensive survey of structures of all kinds to ascertain uses, types, and conditions. An examination was next to be made of late history in building construction so as to ascertain the evolution which has produced the conditions which exist, and so that a statement could be formulated of the trends which have taken place during the past few years. The object of these investigations was to foresee as clearly as possible the immediate future needs of the city.

These studies were to be followed by further intensive investigations of the occupied and unoccupied areas; of land values; of the best uses to which lands could be put because of their topographical condition, proximity to waterways, transportation routes, public education and recreation facilities; of the probable future development of the street system; of the available utilities and means of street transportation and their expansion; of the commercial and industrial tendencies of the city, and of her best lines of expansion; together with all other matters which might influence growth in amount and kind.

After these preliminary studies, it would be possible to formulate a comprehensive Zoning Ordinance. All studies and the drafting of the ordinance were not to be primarily static, i. e., intended solely to stabilize existing conditions, but were to be dynamic, that is, so studied as actually to direct the development of private property along improved lines.

The agreement entered into on the 15th day of September stipulated that in view of the restricted appropriation which was available to your board, the work of Zoning (among other matters) was to be concentrated in a field survey and the preliminary studies prerequisite to the drafting of a Zoning Ordinance and maps.

This report is submitted to outline to you the work which has been done along these lines to date.

In conformity with the above outlined agreement, as soon as work was started, a field survey force was organized under the direction of one of the principals of the Technical Advisory Corporation. These field men were supplied with Atlas sheets showing practically all buildings as they were supposed to exist at the time of publication of the maps. The sheets showed the approximate location of each structure on its lot, and the relative area occupied,

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together with the character of the building (wood, brick, concrete, etc.), height in stories, and the general use (dwelling, garage, store, factory, etc.). The field men checked the facts indicated upon the sheets, adding such details as were necessary in connection with Zoning and street work. Such notes included the number of families occupying the structure, the type of merchandise handled in a store, the sizes of yards, the street improvements, topographical conditions, and all other matters necessary in connection with the work. A total of 7.3 square miles out of a net area of 33.2 square miles (including lands under water in the rivers and Forest Park) was covered by these Atlas sheets. Other maps were provided which covered the balance of the territory. An average of four men with a supervisor was employed for approximately eight weeks, the total aggregating 1,264 hours. This investigation is estimated to have covered 21,771 buildings, 24,321 plots, and that the men traversed 325 miles of streets.

Meantime, an examination was made of the building permits which had been issued for structures erected from Jan. 1, 1916, to Nov. 16, 1921. This work covered 2,470 structures with relation to which the following information was collected as far as was obtainable: The month the permit was issued, the street name, the house number, the principal material of construction, the roof material, the ground floor dimensions, the height in stories and in feet, the size of yards, the proposed use of the building and its estimated cost. For the year 1921, a map was prepared showing the location of each building constructed and by symbols the intended use. Studies have also been commenced of land values, the work being concentrated upon those parts of the city which had valuation of $10 and upward, and of districts for some blocks on each side of certain sections of the Boston & Albany railroad, and the Highland Division of the N. Y., N. H. & H. railroad.

A base map, drawn at a scale of 400 feet to an inch, was prepared for eventual use in making the Zoning maps and for the preservation of data of various incidental kinds. The topographic, contour sheets, so far prepared for the comprehensive topographic map of the city in course of preparation in the office of the engineer of Streets and Engineering were secured, and a 400 foot scale topographic map is being prepared to be used in connection with Zoning studies and other matters. Other maps were prepared showing street car routes, locations of schools, of parks, and of playgrounds. Study maps were also made which showed approximately by a color scheme the major uses of properties, block by block.

Meanwhile, under other divisions of the City Planning Program, tentative studies have been made of the future street system, and detail studies of some portions of it. In addition, scientific computations have been made to ascertain the law which has governed the rate of growth of population of Springfield, and a future growth curve is being prepared for use in connection with Zoning studies and other matters.

It also transpired that building permits were requested for several highly objectional structures designed to be located in residential sections of the

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community, and complying with a request from your board, a preliminary Zoning Ordinance was drafted and presented to you on October 0, 1921. After several meetings, including a largely attended public hearing, a temporary ordinance was adopted on Dec. 8, 1921.

As soon as the topographic map is completed, active steps will be taken toward the preparation of maps which will show the present conditions and use of all buildings in the city and of the existing sizes of yards and courts, building heights, and other data upon which a tentative Zoning Ordinance can be based. It is believed that more work has been done on the matter of Zoning than was called for by the contract, and that a draft of a comprehensive Zoning Ordinance can be submitted to your board in a few weeks.

Respectfully submitted,

TECHNICAL ADVISORY CORPORATION,
E. P. GOODRICH, *Vice-President.*

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APPENDIX "C"

Springfield, Mass., December 24, 1921.

MR. G. C. GARDNER, Chairman, City Planning Board, Springfield, Mass.

Dear Sir:—In the preliminary report submitted to you under date of July 13, 1921, the following observations were made in the Appendix:

Street traffic conditions were observed with some care. Street congestion now exists but is in no sense acute. Comparison of traffic statistics shows that traffic has been progressively increasing during the past few years at a rate which would double it approximately each three years. Traffic observations taken May 27 on Main street, south of Bridge street, showed 9,349 vehicles, or one on the average each 5.4 seconds from 6 A.M. to 8 P.M. During the most congested hour the rate was one vehicle for each 4.3 seconds. On Dwight street, south of Bridge street, the corresponding figures were 11,001 total, or an average of one vehicle every 4.5 seconds between 6 A.M. and 8 P.M. and one vehicle every 3.3 seconds during the most congested hour. Personal tallies at the intersection of Main and State streets during the most congested period on Saturday, June 25, also showed a vehicular count which averaged one vehicle each 3.3 seconds. Police regulation was watched and the highest compliments are deserved. At the present time the method employed is one of individual vehicle control. The usual routes of travel now followed by vehicles, street cars, and pedestrians were observed. Traffic was fairly well distributed over feasible routes due apparently to individual endeavor to escape congested points. A few sidewalk encroachments and building projections were observed, but these were in the minority. The increase which has been taking place in street congestion is rapidly approaching a point when intensive methods will have to be employed or else acute conditions will result.

Generally speaking, the street system of the city consists of three or four thoroughfares of varying lengths, approximately paralleling the river, with radials extending from approximately the center of the community so as to form an irregular fan toward the east. There are three bridges located approximately at quarter points of the river frontage, available for carrying traffic toward the west. The streets "parallel" to the river are none of them straight and no one of them extends continuously from the northern to the southern boundary line. Only a few of the radials afford good connection with the parallel street system. The minor streets running at approximate right angles with the parallel streets are irregular in their width, distance apart, and extent, few of them running for more than two blocks without "jogs." Many alleys exist, some of which could profitably be widened. The pavements are generally in good condition and probably average higher than in the majority of cities of the Springfield class, as to character and present condition of repair. The street system has evidently grown up without regard to metropolitan traffic conditions.

These observations were accompanied by the following initial diagnoses:

A change in the method of traffic control will probably be found advisable in the near future, together with the creation of parallel, detour, and new through streets, the cutting through of some new thoroughfares, the widening of others, the removal of existing sidewalk encroachments, the improvement of pavements, the reduction of parking space and time, and the bringing into operation of several other devices not thus far employed.

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Except for projects already presented to the authorities and in some stages of progress toward accomplishment, nothing should be done until after a comprehensive, intensive investigation has been made of the whole traffic and street expansion problem.

The investigations which were then believed necessary to a complete determination of the problem were given as follows:

Comprehensive traffic statistics should be secured (both pedestrian and vehicular) at all points of present congestion, on all main thoroughfares and at other strategic points. Such points, aggregating possibly 100 in number, should be so located as to make it possible to analyze the reasons for congestion, and furnish data for the establishment of alternative routes, and the best methods of handling traffic as it naturally increases. In the latter item should be considered the installation of the platoon system of street regulation as distinguished from the block system generally employed, when individual control has to be abandoned.

Street traffic observations are suggested above. An analysis should be made of the assessed valuation of properties which would be taken, damaged, or benefited by, or for street widenings or the opening of new streets. Topographical conditions and other factors involved should be studied and kept in mind. These analyses should be applied in every case of a street change heretofore or hereafter proposed. Changes shown to be advisable should be shown systematically on a street plan and an order of urgency should be established. Desirability will depend on considerations already mentioned, on the necessity for diversion of traffic from congested centers, and on that of providing through routes for through travel.

When the contract for the city planning work was awarded on Sept. 15, 1921, it was agreed that your consulting engineers should proceed with the work outlined above, but curtailing it so that "such details as paving, street repairing, and street maintenance will not be carried out in detail" until after receipt of further orders.

To this end, an assistant who had had a considerable experience in conducting street traffic surveys was sent on from New York and organized a staff of observers. They were supplied with proper forms for reporting their observations and stationed at all important traffic points throughout the city. They counted all vehicles which used the sections of street under observation, noting the numbers of those which moved directly across street intersections, turned right, or left, and which passed specified points in each direction. The vehicles were classified in the following ways:

One Horse Iron Tire
- Empty
- One-half Load
- Full Load

Two Horse Iron Tire
- Empty
- One-half Load
- Full Load

Small Auto Trucks
- Empty
- One-half Load
- Full Load

Large Auto Trucks
- Empty
- One-half Load
- Full Load

Automobiles
Street Cars
Special Vehicles

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Observations were made for ten hours at most points. For a single day, on Main street, a series of observations was made for one twenty-four-hour period. Another series for a full week during the usual ten-hour stretch each day was also made on Main street.

Before stationing the men in the field, a study was given to the street system as shown on the city map, and a rapid field reconnaissance was made of actual traffic routes, points of congestion, and where traffic lines diverged.

Observations were actually conducted at the following points:

Springfield end of North End Bridge.
Plainfield and West streets.
Plainfield and Fulton streets.
Plainfield street and Birnie avenue.
Plainfield and Main streets (Monument Square).
Dwight and Lyman streets.
Main and Worthington streets.
Dwight and Worthington streets.
Lyman and Main streets.
Dwight, Hillman, and Pearl streets.
State and Main streets.
State and Chestnut streets.
Chestnut and Carew streets.
Bridge and Water streets.
Chestnut and Lyman streets.
Spring and Worthington streets.
Spring, School, and State streets.
Dwight street (Victoria Square).
State and Water streets.
Union and Water streets.
Union and Main streets.
Belmont avenue and Main street.
Mill street, Belmont and Fort Pleasant avenues, and Locust street.
Fort Pleasant and Forest Park avenues and Leete street.
Central and Maple streets.
Pecousic avenue and Main street.
Longhill street and Sumner avenue.
Fort Pleasant, Beechwood, and Sumner avenues.
Dickinson street, Belmont and Sumner avenues ("The X").
White street and Sumner avenue.
White street and Belmont avenue.
Dickinson street at Forest Park avenue.
Pine and Central streets.
Walnut, Hancock, and Ashley streets.
Central and Hancock streets.
Orange and Dickinson streets.
Oakland and Dickinson streets.
Walnut and Mill streets.
Alden and Hickory streets.
Armory and Liberty streets.
Worthington, Magazine, and Armory streets.
Federal, State, and Armory streets.
Oak, State, Magazine streets, and St. James avenue.
Thompson, Hancock, and State streets.
St. James avenue and Worthington street.

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Winchester Square.
Oak and Walnut streets.
Pendleton avenue, Pine and Walnut streets.
South End Bridge, Springfield end.
Armory and Carew streets.
Liberty and Carew streets.
Carew street at Chicopee road and Norman street.
Carew street and St. James avenue.
Page boulevard and St. James avenue.
St. James circle and St. James avenue.
Wilbraham road and Hickory street.
Boston road and Berkshire street.
Bay road and Berkshire avenue.
Armory and Springfield streets.
St. James boulevard, Rumrill road, and Cottage street.
Page boulevard and Berkshire avenue.
Main and Oak streets (Chicopee).
Boston road, Stony Hill road, and Parker street.
Parker street and Wilbraham road.
Wilbraham road and Tinkham road.
Parker street and Sixteen Acre road.
Allen street and Sixteen Acre road.
Allen street and Plumtree road.

The report sheets turned in aggregate over 1,200. The information was checked and totaled by students of the High School of Commerce under the direction of Miss Alma P. Davis. Twenty-two students assisted in the work. The tabulation sheets are now being rechecked in the office and the observations analyzed. Many such diagrams as the one representing the conditions at the intersection of Bridge and Water streets, which accompanies the special report on the New Bridge approach, will be made, and a map of the whole city will be prepared on which will be shown by widths of bands the amount of traffic observed on each principal street. Not alone will the total traffic for a ten-hour day be thus treated, but similar studies will be made (though not in as complete detail) for the most congested hour of the day.

Street railroad traffic has been studied in equal detail. The schedules of cars on each line were obtained from the railroad management and a program of riding observations planned with the assistance of the following street railway officials: Mr. H. H. Flanders, president; Mr. E. L. Putnam, superintendent; Mr. R. E. Cosgrove, traffic manager; Mr. C. H. Mobbs, assistant traffic manager, and Mr. L. Elkins, inspector. Observers were secured and trained for their work by practice trips. The desired data consisted of the following facts:

Route.
Car number.
Capacity.
Place of stop.
Time of stop.
Time of start.
Passengers on.
Passengers off.

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Cash fares.
Transfers.

Observations were made on each line in each direction for all typical traffic densities. Two hundred sixty-one data sheets were turned in and have been analyzed and diagrammed by high school students under the direction of Prof. C. L. Thorndike. A typical riding diagram is of interest, since from such studies the following information may be secured:

(a) Average haul.
(b) Average load.
(c) Average standing load.
(d) Region of densest travel.
(e) Speed of travel at all times.
(f) Numbers of passengers who board and alight at each stopping point in the city.
(g) Average distance walked in residence districts (with aid of zoning data maps).
(h) Riding habit of residents of districts.
(i) Adequacy of service.
(j) Rerouting possibilities to
  (1) Improve service schedules.
  (2) Reduce street congestion.
  (3) Accelerate travel on cars.
  (4) Reduce operating costs.
  (5) Provide service extensions.
(k) Rescheduling possibilities.
(l) And many other facts.

Diagrams and flow maps will be prepared to visualize the work done and to aid in reaching conclusions. A map has been prepared showing the several trolly routes, and typical slack and rush hour schedules have been secured from the railroad company for study.

Investigations have been made of the general street system as to its north and south streets; its radials; the New Bridge approaches; the congested district; Main, Dwight, and Water streets traffic velocities; the several factors which influence the Main street congestion; the advisability of certain cross connections, widenings, and extensions (later to be reported upon separately); the street railroad track location in the street; the traffic density compared with that of other cities; possible traffic control improvements; the influence of the topography on the street arrangement; the real estate values involved in certain proposed street changes; the reduction of the grades of certain streets; the numbers of parked vehicles on certain streets; and of other factors involved in this intricate problem.

Among the items mentioned above is one with reference to traffic in other cities. The following statistics will be of interest with regard to the use of the most congested street during the most congested sixty minutes of the day:

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City	*Population, 1920*	*Street Name*	*Traffic* (auto only)	*Date*
Chicago,	2,701,212	Rush at Bridge,	860	1918
St. Louis,	773,000	Broadway at Washington,	400	1916
Pittsburgh,	588,193	Penn ave. east of 5th ave.,	581	1921
Newark,	415,609	Market at Broad,	545	1915
Springfield,	129,338	Main at Lyman,	681	1921

The fact that Springfield already has a denser travel than cities up to five times her size shows that

(1) Her traffic is now being handled exceptionally well under the traffic officers on duty.
(2) She may expect two or three times as much congestion, as the population grows, unless steps are taken to alleviate it.

So as to ascertain the factors which contribute to the Main street congestion, a careful study was made of the following items:

(1) Amount of through travel.
(2) Numbers of vehicles turning into and out of the street at each principal intersection.
(3) Amount of cross travel.
(4) Numbers of vehicles parked in each block.
(5) Delays experienced at street intersections by through traffic.
(6) Average speed of travel of vehicles.
(7) Width of roadway.
(8) Speed of street cars.
(9) Numbers of street cars which turn into and off from street.

The worst conditions were found at the intersections of Worthington and Bridge streets. The diagrams show most parking in the block between those streets, of any point observed on Main street. There was more cross travel at State street, and almost as many turns. While all traffic officers show evidence of much skill, all are not equal. A conference and some outside suggestions might possibly serve in an educational way to improve the methods employed at some points.

It is believed however that the very near future will demand a radical change in the method of control to be employed. When such time arrives, the Police Department should give consideration to what may be designated the "platoon" system in contra-distinction to the "block" system now almost universally used. The platoon system may be briefly described as follows:

Imagine a company of troops moving continuously up Main street in one direction, followed after uniform intervals by other companies, each moving in formation. Imagine, further, a similar series of groups moving in the opposite direction. Through the gaps between companies, cross traffic can move. Parts of companies can turn out to the right at any time, and to the left through the gaps between the companies which move in the opposite direction. A street car can move with each company, dropping back to the one behind at each stopping place, then wait until the next company arrives, the interval being occupied in loading and unloading, the car doors being

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kept closed until all members of the company have passed and remaining open during the wait for the overtaking company. A time diagram of this system as applied to Main street has been given some study, and it is believed its practical application would result in handling at least twice the present traffic with even less apparent congestion.

Suggestions for street widenings and extensions are being prepared but cannot be submitted until after the completion of the analysis of the traffic and street car tally sheets. Both are expected at an early date and reports on specific street problems will then be made at a rapid rate.

Respectfully submitted,

TECHNICAL ADVISORY CORPORATION,
E. P. GOODRICH, *Vice-President.*

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APPENDIX "D"

November 10, 1921.

MR. AIME H. COTE, Chairman, City Property Committee, Springfield, Mass.

Dear Sir:—In answer to your request, the Planning Board begs leave to present to you the following report upon the advisability of securing the tract of land bounded by Wheeler avenue, Allen street, and Sumner avenue for the purpose of future school accommodations.

The development of this tract would entail the closing of at least one and possibly two laid out streets, but it does not appear to us that in view of the fact that the longer of these streets is but a trifle over 400 feet in length and the shorter somewhat less than 300, and that it would undoubtedly be possible to plat a new cross street upon the property giving access from Sumner avenue to Allen street or vice versa, that the elimination of one or both of these streets would be a serious matter.

The location in relation to other school buildings appears to be a very satisfactory one, being at a reasonable distance from both the Washington and the White Street Primary schools and at a point which should ultimately become central for a considerable school population. The double frontage too on Sumner avenue and Allen street, which diverge and are therefor exceptionally located as feeder streets, appears especially good.

We are not aware of your policy as to maximum size, so far as primary grade school buildings is concerned, but assume that it would certainly not exceed 16 rooms and possibly be limited to 12 rooms. Nor are we aware whether or not for a primary grade building your committee has a definite policy as to the number of stories in such a building. We are therefore considering the purchase of such land as would provide for a maximum building of 16 class rooms and would permit the building of either the one story or two story type of structure, giving at the same time sufficient playground space for pupils occupying a 12-room building.

Upon the above basis it appears to us that the purchase of the land included between Wheeler and Whittum avenues, and Allen street and Sumner avenue will provide sufficient area for a school and playground.

Before taking definite steps for the purchase of the site we should advise that an examination of the soil be made as it is our impression that quite a large portion of the property under consideration might present conditions involving a considerable extra expense in the erection of a building, expense which is properly chargeable to the land.

It appears to the board that provided the balance of the property lying east of this tract and included between Sumner avenue and Allen street can be obtained at a reasonable figure, it might be well to purchase this for park, recreation, or other city purposes, in case your committee should decide to locate a school there. The board feels, however, that in case the Zoning Ordinance now awaiting enactment is passed there would be no necessity for

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purchasing this land to prevent the erection thereon of objectionable structures and therefore such purchase might be delayed as seemed wise to you.

The board has been unable in the limited time to make an exhaustive study as to other possible locations, but assumes that your committee has already had this matter in hand and that if other sites were under your serious consideration you would have notified us.

With this we present a carbon print indicating present and tentative schoolhouse sites, together with a brief analysis of the advantages and disadvantages of the proposed location as submitted by our advisers.

Yours very truly,

CITY PLANNING BOARD,

G. C. GARDNER, *Chairman.*

November 9, 1921.

City Planning Board, Springfield, Mass.

Gentlemen:—The City of Springfield is understood to contemplate the location of a new primary school and playground on the triangular tract of land bounded by Allen street and Sumner and Wheeler avenues. This piece of land is in a rapidly growing residential district. It is proposed to erect a school which would cover from 12,000 to 18,000 square feet, probably facing the building on Wheeler avenue, leaving the remainder of the tract for playground purposes.

This site is within thirty-four hundred (3,400) feet of the main central boundary just to the east of the angle which the city boundary makes as it roughly goes around Forest Park. It is only two thousand (2,000) feet from the Highland division of the New Haven railroad.

It is bounded on two sides by well traveled thoroughfares, viz., Allen street and Sumner avenue. A very large proportion of the children going to and from school or using the playground must therefore cross lines of high-speed automobile travel, which are apt to increase in density and consequent danger to pedestrians. This danger is obviously greater with reference to primary scholars than with older ones. With eventual electrification and elimination of grade crossings on the Highland branch of the New Haven railroad it is more than possible that a trolly line would be extended out Sumner avenue or Allen street or both thoroughfares. This would augment the danger.

The site is within fifteen hundred (1,500) feet of the property and factory of the Diamond Match Company. Match making is an industry usually considered hazardous in zoning ordinances. The history of explosions and conflagrations originating in match factories is bad.

The assessed valuations of the several plots included in the tract in question are moderate and the area can doubtless be acquired by the city at this time without undue expense. Because of the fact, however, that the parcel is triangular in shape and bounded on two sides by well traveled thorough-

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fares, it might logically become a local business center and in such case would eventually carry much higher valuations and return to the city in annual taxes a much greater amount than would be the case with reference to an equal area not so strategically located as far as traffic is concerned.

The population map showing the distribution of school sites throughout the city and especially in the district between Forest Park and the Highland branch of the New Haven railroad, indicates about what will be required some ten or twenty years hence with reference to the distribution in the district to the east of the railroad and comprising about the same general area. Judged by this criterion it would seem wiser to select, at this time, a site which would more nearly conform to the best eventual distribution than to endeavor to include at the moment as large an area as possible of present population.

Studied from this point of view it would seem wiser to locate the present proposed school further to the north than is the proposed site. Such a location would also probably be advantageous with reference to property values and the obviating of the necessity of crossing main traffic routes by the children. To be sure those which now reside to the south of Sumner avenue would have to cross both that thoroughfare and Allen street, whereas, with the present proposed site, they would have to cross only one main line of travel. All possible additional distance to the Diamond Match Company from the school and playground location should be secured.

While detailed topographical information is not available at the present moment it is reported that the site in question is occasionally flooded. This condition can doubtless be obviated by the installation of a proper drainage system. The possibilities of poor drainage merit careful consideration in connection with the selection of this or any other site.

Until such time as comprehensive population distribution studies can be completed and the traffic survey data already collected can be analyzed, any such report as this one must be considered premature and tentative. If possible the decision as to the exact site of the proposed school should be postponed until after the collection and analysis of all fact data for the whole city, upon which correct determination can be made as to this and other similar problems.

In conclusion it should be stated that your consultants believe that the proposed site between Allen street and Wheeler and Sumner avenues is not as advantageous as it might be possible to find elsewhere in the vicinity and it is recommended that further search be made with the points in mind which have been suggested in this report. On the accompanying map have been indicated in yellow possible eventual schoolhouse locations. Of these the one just to the east of Whittum avenue would seem worthy of special study as an alternative to the one proposed by the city authorities.

Respectfully submitted,

TECHNICAL ADVISORY CORPORATION,

E. P. GOODRICH, *Vice-President.*

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APPENDIX "E"

November 30, 1921.

MR. AIME H. COTE, City Property Committee, City of Springfield.

Dear Sir:—We beg to hand you herewith two reports from our advisers showing the possibilities of a Central Athletic Field for the City of Springfield upon the land south of West street and between the river and the B. & M. railroad.

While we regret exceedingly the delay in handing you these reports earlier—a delay caused by the misunderstanding at the post office in addressing mail to the Planning Board—this delay has enabled us to include the second report which, with the accompanying plan, indicates the land we should recommend acquiring in order to provide for a field of the capacity suggested by the school board.

The Planning Board's conclusion, after a study of these reports and observation of the site, are as follows:

1. That before the city expends any material amount of money in the development of the proposed athletic field at West street, further investigations be made as to alternative sites in other parts of the city.

2. That a more thorough and careful study be given by this board to the question as to whether or not one central athletic field including provisions for professional baseball be recommended to your committee, or whether two or more regional athletic fields be recommended.

Whether or not it is wise for the municipality to provide accommodations for regular professional baseball is a question upon which the board is at present undecided. There appear to be weighty reasons in favor of such a policy and there would appear to be objections to it, and the board believes that your committee is fully as well qualified to consider the matter wisely and intelligently as is the board.

The board is proceeding with its investigation of the subject of Athletic Fields and Playgrounds and will hand to your committee, if you so desire, its further findings as soon as made.

Respectfully submitted,

CITY PLANNING BOARD,
G. C. GARDNER, *Chairman.*

Springfield, Mass., Nov. 21, 1921.

MR. G. C. GARDNER, Chairman, City Planning Board, Springfield, Mass.

Dear Sir:—In compliance with your request, some study has been given to the subject of the best location for an athletic field designed primarily for the use of school children in the intermediate and higher grades. This study was undertaken out of its regular place in the program of work which seemed

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most logical (and which would have eventually secured a greater basis of fact upon which a more authoritative conclusion could be made), because of the suggestion that the triangular piece of property located on the south side of the North End Bridge approach adjacent to the Connecticut river should be secured for such a field.

Visits were made to the recreation facilities provided in Forest Park, to Pratt Field, to Van Horn Park, to the Emerson Wight Playground, to the North End Bridge site, and to other possible locations. A map was prepared showing the location of all schools, and the school attendance at various buildings was secured from the Board of Education. Before preparing the report, it would have been desirable to complete the population distribution map for which arrangements have been made. This population study will require several weeks. All sites were studied with reference to the adequacy of present and possible street transportation facilities, both vehicular and street railroad. Consultations were held with members of the Board of Education and with other officials, and their recommendations for the facilities which they felt should be included in an athletic field were given most careful consideration.

Careful study led to the tentative conclusion that an athletic field capable of supplying the whole of the present city (to say nothing of the future one) was inadvisable. The recreation facilities afforded in Forest Park were felt sufficient for the south end of the city. Those contained in Pratt Field can be made to supply the needs of the region about it without difficulty, at least for the present. The facilities north of the B. & A. railroad were deemed deficient in the extreme. It thus seemed wise to study the situation from the viewpoint of what may be called the North End. In that section of the city is to be found more than half of the school attendance.

A well arranged and strategically located athletic field could be made to supply the needs of the whole community on special occasions such as pageants, inter-city football games, and other functions. Provision for the several athletic needs which should be considered, must depend primarily upon the area which can be secured and its topographical condition. For an athletic field of ample size, the following facilities should be provided:

A baseball diamond of standard size equipped with grandstands and bleachers, shower baths and administration offices, concesssion booths, ticket booths, ample parking space for automobiles, and all other necessities required for inter-scholastic and possible intercollegiate games. Such a field should be surrounded by a wall or fence so that admission could be collected. (It is only through events derived in this manner that athletic activities can be carried on by the school athletic associations.) The space assigned to baseball should also be arranged to care for football, and preferably also for running, jumping, and other field athletics. In connection with the latter, a quarter-mile track with a 220-yard straightaway should be included within the inclosure.

In addition to the fields for these sports, two additional baseball diamonds

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for practice purposes should be provided. These can also be used for football practice when required except that it would probably be advisable to provide an additional soccer field.

Two additional girls' hockey fields should be arranged, and if possible enough tennis courts (possibly twelve) to supply the needs in that sport for high school pupils.

While an athletic field of the size which should be provided for the above mentioned activities would be ample as far as size and equipment is concerned for professional baseball, it was felt that the combination of professional and amateur use of such a field was inadvisable because of the influence which professionals might have upon amateurs.

After due consideration was given these several factors, attention was turned to the North End Bridge site. Several studies were made of the possibility of using the ground in its present shape and size. A photostat of one such study was transmitted with the weekly progress report of Nov. 17, 1921. On the basis of this study, it was evident that the land is not adapted for the best design of a municipal athletic field. A survey was made of the topography and planting of the adjacent unimproved land toward the south. It has been impossible thus far to complete studies of the enlarged site, for the specific activities enumerated above. If possible, action with reference to this matter should be postponed until such studies can be completed.

In the meantime, however, several alternative sites were given cursory examination. The best of them seemed to be the tract bounded roughly by Carew street, Cass street as extended, Stafford street, and Armory street. This site is within a short walk of probably one-half of the school pupils in the city. It is or can be made readily reachable for large crowds of spectators. The topography lends itself exceptionally well for a large natural stadium. The area is large enough to accommodate practically all of the activities deemed necessary if certain grading is done. It is located about the center of the built-up district north of the B. & A. railroad. It is recommended that informal approaches be made by members of your commission to the owners with the point in view of exciting their public spirited interest and of obtaining some intimation of the conditions under which the site might be secured by the city.

As already stated, this report can be only tentative at the present time because data now being secured and in course of analysis is not yet in hand. Since the season is now so far advanced that no construction work of importance can be efficiently started this year, it is strongly recommended that no action be taken at this time with regard to the acquisition of any site, but that steps be taken looking to the securing of options on several alternative ones, each of which can be carefully studied and compared as soon as proper data is obtainable.

Respectfully submitted,

THE TECHNICAL ADVISORY CORPORATION.

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November 28, 1921.

MR. G. C. GARDNER, Chairman, City Planning Commission, Springfield, Mass.

My dear Mr. Gardner:—Further study has been made of the possibility of making use, for central athletic field purposes, of the tract of land now owned by the city on the south side of the North End Bridge approach.

Inclosed is a study supplementing the one already forwarded to you. The new study contemplates the inclusion of a considerable area not now belonging to the city adjacent to the city owned property and sufficient in size to accommodate the several facilities felt necessary by the Board of Education authorities for a central athletic field. The area of the city owned land is 14.1 acres.

In order to get even a fairly satisfactory athletic field, it is believed essential to acquire property which should aggregate approximately 20 acres now included in the tract called Hampden Park. These several studies lead to the following conclusions:

1. The tract of land at present owned by the city is not large enough for a central athletic field especially if a baseball diamond for professional use is to be included.
2. It is not located at the best point with reference to its use for school athletics; because
   (a) It is not central with reference to the schools, especially the high schools.
   (b) It is not central with reference to the community at large.
   (c) It is susceptible of approach only from practically two directions.
   (d) While no definite information is available as to the costs of acquiring additional lands and of alternative sites, it is probable that the extra lands which must be acquired adjacent to the proposed site will be held at such prices that alternative sites would be preferable from a financial standpoint.
3. It is believed inadvisable to purchase the grandstand now on the site, because
   (a) The site is not deemed the best one as above outlined.
   (b) The grandstand is too small to accommodate the numbers of spectators for which it is believed provision should be made after a careful study of the whole problem.
4. Special studies of the transportation problem with reference to a large athletic field showed that special difficulties would be encountered in an endeavor to work out the problem in connection with even an enlarged field at the proposed site.
   Extreme difficulties would be encountered unless an extended waterfront boulevard were provided. While such a boulevard would be of inestimable value to the community, and may eventually be secured, the purchase of property at this time, more or less contingent upon the eventual construction of the boulevard, is believed inadvisable because other profitable uses can be made of the present owned land irrespective of athletic purposes.

Respectfully submitted,

TECHNICAL ADVISORY CORPORATION,

(Signed) E. P. GOODRICH, *Vice-President.*

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APPENDIX "F"

CITY OF SPRINGFIELD

In the Year One Thousand Nine Hundred and Twenty-One

AN ORDINANCE ESTABLISHING CERTAIN BUILDING DISTRICTS.

Be it ordained by the City Council of the City of Springfield, as follows:

SECTION 1. The City of Springfield is hereby divided into zones or districts to be known respectively as Residence Districts and Non-residence Districts, as follows:

Non-residence Districts shall comprise (1) all lands which at the time this ordinance goes into effect are used for any business or industry other than farming, truck gardening, the growing of trees, shrubs, vines or plants, the raising of animals, and the conduct of a boarding or lodging house, and (2) all lands located and fronting upon any section of any street which lies between the outer lines of two successive intersecting streets and in which not less than one-half of the ground floor frontage on each side of said street is at said time devoted to business or industry or is manifestly intended to be so used.

Residence Districts shall comprise all areas not included in Non-residence Districts.

SECTION 2. Except as hereinafter provided no parcel of land lying in a Residence District and not at said time devoted to any business or industry, other than those specified in section one, shall hereafter be used therefor, and no permit shall be issued for the erection, alteration or conversion of any building for or to such use upon any such parcel.

SECTION 3. A permit may be issued for the erection in a Residence District of a building for the purpose of any business or industry, or for the alteration or conversion of a building in such district for or to such purposes, provided that there be filed with the application for such permit written consents thereto signed and acknowledged by the owners or legal representatives of the owners of not less than three-fourths of all lands used for other than business or industrial purposes which front on the same side of the street and which lie between the two intersecting streets nearest to and on either side of the land in question or within four hundred feet on either side thereof in case the nearest intersecting street is more than that distance therefrom, and also of all lands fronting upon the other side of the street and directly opposite said land, and of all lands immediately in the rear thereof; and provided further that the City Council shall after public hearing so order.

SECTION 4. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

Approved December 8, 1921.

Attest: CLIFFORD F. SMITH, *Assistant City Clerk.*

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BUILDING DEPARTMENT

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TWELFTH ANNUAL REPORT

OF THE

BUILDING DEPARTMENT

SPRINGFIELD, MASS., December 31, 1921.

To the Honorable City Council of the City of Springfield, Mass.

GENTLEMEN:—In spite of the rather distressing times, more permits for building operations have been issued during the year 1921 than in any other year since the creation of the Building Department. The cost of these improvements, while not the highest recorded, still ranks high when compared with the amounts for other years. The advance made in actual home building is most encouraging; about five hundred (500) one-family houses and more than one hundred (100) two-family houses have been erected during the year; and in the meantime permits for the erection of six hundred and nine (609) garages have been issued. With the exception of approximately one hundred (100) monitor stores, there has been very little building of a speculative character. Most of the work has been done to supply an actual demand.

The Building Ordinance has recently been slightly revised so as to do away with some of the requirements that have gradually become obsolete during the past four or five years, and in the new form it will become a chapter in the new codification of the Ordinances of the city. This revised edition of the Building Ordinance will serve until such time as the United States Bureau of Standards and the Committee on "Standard Building Code Requirements," appointed by the Secretary of Commerce, make their reports and recommendations. Then, as soon as possible, our Building Ordinance should be rewritten and revised so as to include all of the reasonable standard requirements. In considering the proposed revision, economy will be the great objective, but safety and fire prevention should receive careful attention.

DANGEROUS BUILDINGS.

Twenty (20) buildings have been found to be in a dangerous or useless condition, and these have been demolished.

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Only one fire occurred during the year that seriously damaged the construction of a building.

HOTELS AND LODGING HOUSES.

By a requirement of the law, this department examined in the month of April the means of egress in sixteen (16) hotels and forty-seven (47) lodging houses, containing a total of three thousand five hundred and seventy-three (3,573) guest rooms. A report of these inspections was sent to the Massachusetts Department of Public Safety.

FIRE ESCAPES.

Inspections have included one hundred forty-seven (147) fire escapes. These are generally in good condition. Seven (7) owners were notified, and requested to paint or make repairs.

ELEVATORS.

The condition of the elevators has improved during the year. There are seven hundred and ten (710) now in use.

Six hundred eight (608) certificates of approval have been issued.

Two hundred fifty-eight (258) operators' licenses have been issued. The number of women operators has decreased from eighty (80) a year ago to fifty-six (56) for the past year.

No fatal accident occurred in connection with an elevator, and but one person was injured—quite seriously—but he will recover.

SIGNS.

Sixty-nine (69) permits for new signs, and two (2) for marquees, projecting over public ways, have been granted by the City Council.

The ordinance fixing a time limit for "existing" projecting signs, which expired April 10 last, was renewed, and the time extended to April 10, 1924.

At the present time there are two hundred fifty-two (252) "existing" and two hundred thirty (230) "new" projecting signs.

There have been issued seventy-eight (78) permits for signs other than projecting signs. Of these, fifty-eight (58) were placed flat against the building, two (2) were projecting, eight (8) were roof signs, and ten (10) were illuminated.

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THE TABLES.

Following are tables giving in convenient form the record of the work of the Building Department for the year 1921:—

BUILDING OPERATIONS BY THE CITY OF SPRINGFIELD, MASS.

New Buildings.

Ward 1—Van Horn Park,	Ball Stand,.....	$5,000
Ward 7—Forest Park,	Comfort Station,.....	2,000
Ward 7—Whittum Avenue,	Portable School,.....	5,000
Total,.....		$12,000

Additions and Alterations.

Ward 8—87 Hampden St., I. O.,	Alterations—School, ...	$4,000
Ward 3—Pynchon Street,	School Moved,.....	53,000
Ward 2—95 Main Street,	Alterations—Hooker School,.	8,000
Ward 8—Dewey Street,	Alterations—Portable School,	1,000
Ward 5—Eastern Avenue,	Alterations—School,.....	2,300
Ward 8—Boston Road,	Portable School Moved,....	250
Ward 3—Court Street,	City Hall—4th Floor,.....	1,550
Ward 3—State Street,	Junior High School,.....	625,000
		$695,100
Total for New Buildings and Additions,.....		$707,100

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BUILDING PERMITS GRANTED

From Jan. 1 to Dec. 31, 1921.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Bakeries						1		1					2
Blacksmith Shop								1					1
Churches						1							1
Dye Houses				1									1
Dye House and Garage							1						1
Factories				1		1	1					1	4
Foundries					1	1							2
Garages	14	18	64	72	68	67	52	58	62	67	47	20	609
Garage and Salesroom	1												1
Garage and Storage											1		1
Houses—one family	7	12	32	46	70	85	59	54	41	44	20	25	495
Houses—two family	7	3	8	6	8	14	8	15	9	16	14	13	121
Ice Houses											2	1	3
Lunch Wagons	1										1		2
Parish Houses			1										1
Service Stations			1		1	1	1	1				2	7
Shops	1			1	2	1		2	1		1		9
Stables						1					1		2
Storage Buildings	3	1	3	2	7	4	2	2	9	3	4	3	43
Stores			5	2	7	2	4	5	1	4	6	2	38
Stores and Offices								1					1
Stores and Tenements								1	1		1	1	4
Synagogue								1					1
Tenements			1		2	1	3	2	1	2	2	2	16
Miscellaneous				4	10	7	2	4	3	6	3	1	40
Additions and Alterations	32	28	72	76	50	58	51	33	49	39	36	24	548
Totals	66	62	187	211	226	245	184	181	177	181	189	95	1,954

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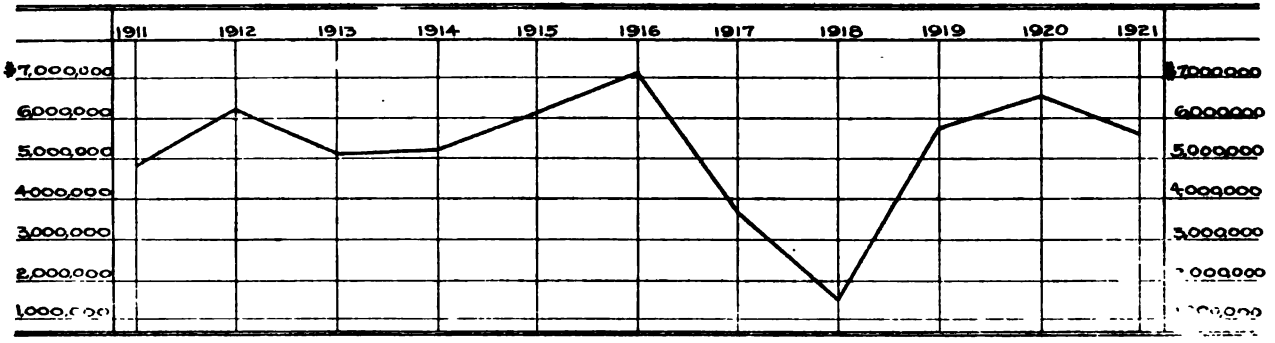
COMPARATIVE STATISTICS.

Table showing the comparative number and cost of building operations since the creation of the Building Department.

Year	New Buildings	Cost	Additions and Alterations	Cost	Total Costs
1910*	194	$1,410,892	89	$83,043	$1,493,935
1911	704	4,230,140	505	665,823	4,895,963
1912	870	5,507,434	619	785,060	6,292,494
1913	763	4,259,378	566	788,087	5,047,465
1914	851	4,020,873	641	1,035,369	5,056,242
1915	936	5,529,357	559	532,824	6,062,181
1916	1,122	6,258,980	573	842,052	7,101,032
1917	748	2,834,457	451	945,155	3,779,612
1918	366	756,085	421	842,338	1,598,423
1919	1,022	3,773,793	571	2,106,052	5,879,845
1920	921	5,061,413	488	1,613,641	6,675,054
1921	1,406	4,304,900	548	1,364,634	5,669,534

*For three months only (Oct., Nov., Dec.).

CHART ON YEARLY TOTAL COSTS.



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ESTIMATED COST OF NEW BUILDINGS

From Jan. 1 to Dec. 31, 1921.

WARD	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
1	$15,830	$13,000	$23,800	$23,450	$67,845	$21,640	$71,875	$44,900	$13,875	$23,050	$36,600	$24,350	$378,715
2	15,200	8,000	35,950	130,600	23,800	19,400	9,600	19,640	800	4,775	6,750	18,000	292,515
3	7,500	700	35,400	500	108,785	181,200	78,000	71,925	7,075	925	49,800	650	542,460
4		975	7,200	2,650	3,550	5,800	8,625	9,500	1,850	3,230	3,350	60	46,790
5	300		50	1,950	60,325	10,325		1,075	3,575	16,250	21,455	1,900	118,205
6	37,800		66,900	14,900	2,550	47,325	28,800	125,200	16,075	13,150	46,200	8,500	408,400
7	20,500	24,150	93,735	58,260	88,860	175,850	90,200	123,980	73,875	166,700	144,700	157,950	1,223,330
8	21,465	34,600	81,850	108,275	284,675	209,675	110,825	122,725	65,996	113,750	82,315	57,835	1,293,985
Totals	$118,595	$81,425	$344,435	$340,585	$640,390	$671,715	$397,945	$519,945	$187,620	$341,830	$391,170	$269,245	$4,304,900

NOTE:—In addition to the above, "Verbal Permits" have been granted (and recorded) for 145 building operations, costing less than $25.00 each and aggregating $4,552.

ESTIMATED COST OF ADDITIONS AND ALTERATIONS

From Jan. 1 to Dec. 31, 1921.

WARD	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
1	$275	$1,600	$350	$3,250	$1,000	$7,590	$3,200	$1,485	$3,800	$230	$1,400	$11,875	$36,555
2	300	950	1,350	3,800	4,750	17,375	7,300	3,950	3,075	800	4,700	800	49,150
3	12,500	26,665	52,975	136,675	5,800	79,720	46,470	9,700	10,900	627,400	11,550	8,700	1,029,055
4	7,350	350	3,165	5,250	3,675	2,925	13,900	5,300	9,725	2,450	7,450	50	61,590
5		1,700	1,575	26,725	4,000	1,300	2,650	150	550	1,390	4,550	3,000	52,590
6	1,650	3,200	3,120	3,900	280	5,490	1,450	1,750	800	18,550		2,490	42,680
7	764	1,650	2,855	3,550	5,025	3,350	800	550	2,650	5,075	16,360	5,925	49,059
8	9,320	1,250	6,255	3,970	900	5,485	5,750	400	3,675	3,050	750	3,150	43,955
Totals	$32,159	$37,365	$72,145	$187,120	$25,430	$123,240	$81,520	$23,285	$35,175	$658,945	$47,260	$40,990	$1,364,634

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CLASSIFICATION OF BUILDINGS.

	Permits Granted				Cost			
	1st Class	2d Class	3d Class	Total	1st Class	2d Class	3d Class	Total
Bakeries		2		2		$1,500		$1,500
Blacksmith Shop		1		1		5,000		5,000
Churches		1		1		43,000		43,000
Dye Houses		1		1		2,500		2,500
Dye House and Garage		1		1		18,000		18,000
Factories		4		4		68,500		68,500
Foundries		2		2		134,500		134,500
Garages	8	345	256	609	$395,500	461,800	$66,020	923,320
Garage and Salesroom		1		1		27,000		27,000
Garage and Storage		1		1		3,000		3,000
Houses—one family		4	491	495		15,000	1,493,650	1,508,650
Houses—two family		1	120	121		5,000	728,600	733,600
Ice Houses			3	3			43,000	43,000
Lunch Wagons		2		2		11,000		11,000
Parish Houses			1	1			65,000	65,000
Service Stations	1	4	2	7	100,000	2,200	500	102,700
Shops	1	7	1	9	2,000	28,750	400	31,150
Stables			2	2			650	650
Storage Buildings	1	8	34	43	100	45,500	8,920	54,520
Stores		15	23	38		186,650	45,260	231,910
Stores and Offices		1		1		23,000		23,000
Stores and Tenements		3	1	4		29,500	3,500	33,000
Synagogues		1		1		15,500		15,500
Tenements		1	15	16		50,000	132,800	182,800
Miscellaneous	1	11	28	40	1,500	13,625	26,975	42,100
Total	12	417	977	1,406	$499,100	$1,190,525	$2,615,275	$4,304,900
Additions and Alterations	1	170	377	548	625,000	534,610	205,024	1,364,634
Total	13	587	1,354	1,954	$1,124,100	$1,725,135	$2,820,299	$5,669,534

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NEW BUILDINGS—ADDITIONS AND ALTERATIONS

From Jan. 1 to Dec. 31, 1921.

Months	Permits	New Buildings	Permits	Additions and Alterations	Totals	Total Cost
January...	34	$118,595	32	$32,159	66	$150,754
February...	34	81,425	28	37,365	62	118,790
March.....	115	344,435	72	72,145	187	416,580
April.....	135	340,585	76	187,120	211	527,705
May.....	176	640,390	50	25,430	226	665,820
June.....	187	671,715	58	123,240	245	794,955
July.....	133	397,945	51	81,520	184	479,465
August....	33	519,945	148	23,285	181	543,230
September.	128	187,620	49	35,175	177	222,795
October....	39	341,830	142	658,945	181	1,000,775
November.	103	391,170	36	47,260	139	438,430
December..	71	269,245	24	40,990	95	310,235
Totals...	1,188	$4,304,900	766	$1,364,634	1,954	$5,669,534

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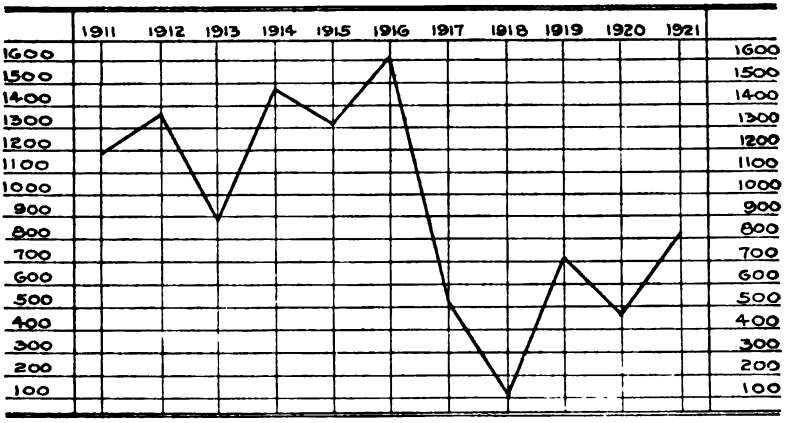
HOUSING ACCOMMODATIONS.

Table showing number of apartments in tenement houses, three, two, and one family dwellings, erected in the past eleven years, 1911-1921.

Date	Tenement Houses	Dwellings						Tenements and Dwellings
	Apartments	Three Family		Two Family		One Family		
	Total	Number	Total Rents	Number	Total Rents	Number	Total	Yearly Totals
1911	498	71	213	177	354	125	692	1,190
1912	554	84	252	220	440	125	817	1,371
1913	248	61	183	168	336	116	635	883
1914	736	79	237	172	344	157	738	1,474
1915	636	14	42	183	366	268	676	1,312
1916	877	Prohibited by Ordinance (Applies to frame buildings)		187	374	361	735	1,612
1917	203			70	140	176	316	519
1918	32			16	32	37	69	101
1919	205			119	238	261	499	704
1920	112			49	98	253	351	463
1921	84			121	242	495	737	821

CHART ON YEARLY TOTALS.



NOTE.—During the year four one-family houses, five two-family houses, two four-family houses, one six-family house, and one tenement house for twenty-two families have been demolished.

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INSPECTIONS BY THE BUILDING INSPECTORS.

Table showing number of inspections each month, and for what purpose.

	New Buildings	Additions Alterations	Specials	Fires	Fire Escapes	Totals
January	249	199	76	4		528
February	202	80	27			309
March	330	116	43	1		490
April	261	102	152		100	615
May	392	128	90	1	8	619
June	726	157	57		10	950
July	399	81	47			527
August	372	120	53			545
September	415	166	98			679
October	482	147	85	2	19	735
November	467	77	75	1	10	630
December	364	85	76	1		526
Totals	4,659	1,458	879	10	147	7,153

VIOLATIONS REPORTED AND CORRECTED.

Building without a permit	88
Defective construction	14
Dangerous buildings	20
Flue lining omitted	12
Woodwork placed against chimney	8
Omission of fire stops	65
Lathing without notification or permission	27
Heaters installed without permission	89
Omission of shields over heaters and smoke pipes	22
Woodwork too near heaters and smoke pipes	4
Dangerous chimneys	18
Fire doors omitted	6
Omission of ladder to roof scuttle	1
Miscellaneous	131
Totals	505

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NUMBER OF STEAM BOILERS INSTALLED

From Jan. 1 to Dec. 31, 1921.

	Wards								
	1	2	3	4	5	6	7	8	Totals
January	1	2	5	1	3	1	10	12	35
February	5		1	3		2	11	2	24
March	2	2	2				5	3	14
April	3	1		3	1	2	8	9	27
May		1	1	1		1	9	6	19
June	4	1				1	22	9	37
July	2		1	1			19	19	42
August	4		6	3	1	10	6	11	41
September	4	1	2	1	6	3	18	12	47
October	7	6	2	4	4	2	13	14	52
November	9	5	13	6	12	13	45	23	126
December	8	3		1	5	1	24	11	53
Totals	49	22	33	24	32	36	190	131	517

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NUMBER OF HEATING FURNACES INSTALLED

From Jan. 1 to Dec. 31, 1921.

	Wards								
	1	2	3	4	5	6	7	8	Totals
January	1	1	1	4			1	12	20
February							1	3	4
March									
April	2							2	4
May								4	4
June								1	1
July							1	6	7
August									
September	1				1		2	5	9
October							1		1
November	3	1		1	3		2	9	19
December									
Totals	7	2	1	5	4		8	42	69

Note:—Permits have been granted for the installation of seven bake ovens.

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ELEVATOR INSPECTIONS

From Jan. 1 to Dec. 31, 1921.

	Hydraulic Passenger	Hydraulic Freight	Electric Passenger	Electric Freight	Hand Power	Dumb Waiter	Belt Elevators	Special Inspections	Totals	Written Reports	Defective Elevators
January	12	13	11	10		13	14	87	160	128	13
February	2	13	18	9		8		86	136	90	11
March	6	27	1	12	3	6	9	83	147	93	29
April	6	47	7	15	4	7	14	61	161	172	23
May	5	19	7	21	5	7	8	38	110	153	30
June	7	29	11	19	3	12	12	46	139	172	21
July		15	7	22	2	23	16	54	139	171	8
August		8		10			1	33	52	40	2
September	10	13	4	2	1			63	93	60	7
October	13	12	9	9		4	1	57	105	84	11
November	4	16	4	8	1	2		70	105	68	8
December	5	16	8	3	1	4	4	57	98	45	18
Totals	70	228	87	140	20	86	79	735	1,445	1,276	181

NOTE:—During the year thirteen (13) elevators have been removed and thirty-two (32) new elevators installed; seven hundred and ten (710) are now in use. Six hundred and eight (608) certificates have been issued.

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ELECTRICAL INSPECTIONS.

Table showing number of inspections made from Jan. 1 to Dec. 31, 1921.

Inspections	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
New installations	280	216	361	424	420	405	355	388	407	398	414	355	4,426
Old installations	27	25	23	13	16	22	25	15	14	17	19	24	240
Additions and alterations	222	166	178	160	192	174	196	141	211	212	179	170	2,201
Temporary work	3	3	3	4	1	3	3	2	4	6	7	12	51
Fixtures	160	121	170	175	235	228	184	148	187	200	203	206	2,217
New electric signs	2		3	2	1	2	2	2	5		2	2	23
Totals	694	531	738	778	865	834	768	696	828	833	824	769	9,158

Table showing number of defective installations discovered and corrected during the year from Jan. 1 to Dec. 31, 1921.

Defective Installations	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
New installations	63	52	69	91	59	91	82	88	96	96	113	82	982
Old installations	20	13	15	6	9	15	20	4	8	10	11	13	144
Additions and alterations	30	26	28	30	36	34	38	32	33	31	38	34	390
Temporary work													
Fixtures	25	25	38	25	34	40	36	21	33	23	35	22	357
New electric signs							1	1					2
Totals	138	116	150	152	138	180	177	146	170	160	197	151	1,875

Note:—Permits have been issued to 326 contractors and others. Number of service permits 2,024. Number of installation permits 3,569.

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PLUMBING.

Table showing number of Permits, Inspections, and Violations—1921.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Permits for work in new buildings....	16	16	25	37	42	61	60	51	48	46	58	35	495
Permits for work in old buildings...	26	29	49	68	83	51	56	69	58	62	50	47	648
Regular inspections.....	181	135	182	220	234	344	324	342	312	294	330	205	3,103
Special inspections.....	31	98	30	40	45	42	25	25	39	20	24	13	432
Violations.....	1	2	2		3			4	5		3	2	22

Table showing number of Fixtures installed during 1921.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Water closets.....	47	56	94	97	119	165	142	162	123	184	132	90	1,411
Lavatories.....	34	42	156	71	81	252	121	146	96	139	119	72	1,329
Baths.....	19	33	50	63	64	73	92	121	74	105	93	54	841
Laundry trays.....	21	31	39	55	58	65	69	101	69	71	79	47	705
Sinks.....	37	33	58	85	101	104	105	137	98	146	107	78	1,089
Urinals.....	3	3	14		3	4	1	5	3	2	2	2	42
Totals.....	161	198	411	371	426	663	530	672	463	647	532	343	5,417

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GAS FITTING.

Table showing number of Permits, Inspections, and Violations—1921.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Permits—New Buildings	9	13	19	29	28	40	32	38	39	34	50	33	364
Permits—Old Buildings	10	16	66	85	140	89	74	89	85	163	112	99	1,028
Permits—Gas Fixtures			6	1	6		1		1		1	1	17
Permits—Water Heaters	22	25	47	53	59	221	116	83	29	26	42	18	741
Inspections—Piping and Fixtures	38	57	64	136	91	101	83	128	131	153	96	104	1,182
Inspections—Water Heaters	37	32	48	60	61	212	164	89	38	31	33	51	856
Special Investigations	55	110	65	72	132	110	71	119	63	132	123	40	1,092
Violations			16		4	15	14	14	7	5	1	6	82

NOTE:—During the year, four hundred and ten (410) certificates have been issued to the Springfield Gas Light Co.

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PROSECUTIONS.

The department has had but one case in court: A violation of the law, requiring halls and stairways in tenement houses to be adequately lighted at night. A sentence was pronounced, but no fine imposed.

BOARD OF APPEAL.

Two meetings of the Board of Appeal were called for the purpose of considering the merits of new methods of use and material, equivalent to those required by the Building Ordinance.

The following specifications were established to govern the use and manufacture of the approved items.

"Exterior Stucco."

To Whom It May Concern:—

Part I, Section 12, of the Building Ordinance reads:

"Methods of construction equivalent to those required by the provisions of this ordinance may be allowed with the written consent of the Building Commissioner and the Board of Appeal specifying the same."

In compliance with the authority thus conferred, the Board of Appeal has formulated and hereby establishes the following:—

Specification.

Balloon frame buildings finished on the outside with cement plaster shall have their outer walls tightly boarded and the lathing furred off not less than one quarter of an inch, to obtain a proper clinch.

On such buildings, not exceeding two (2) stories in height, the boarding may be omitted if the studs are placed not more than sixteen (16) inches on centers, with braces not less than one (1) by six (6) inches in size, nor less than four (4) feet long, well nailed in place in each story, to be placed two (2) at each corner, and as often as every twelve (12) feet along the sides of the building; provided that the outside studs in each story and part of a story are at least two (2) by four (4) inches in size, said braces to be at an angle of not less than thirty (30) degrees with the floors; each brace to be in one piece and nailed with two (2) eight-penny nails at each stud; and provided galvanized metal lath, or painted Armco Herringbone lath (neither to be lighter than twenty-four (24) gauge), or an approved stucco board is used, the same to be stapled or nailed in accordance with the Building Commissioner's orders. When metal or iron lath is used, it shall be back plastered on the entire outside walls be-

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tween the studs, not less than three quarters (¾) inch thick. All mortar for exterior and back plastering shall be Portland cement mortar.

Signed:

THOMAS J. O'BRIEN,
D. W. MELLEN,
GEORGE C. GARDNER, *Chairman,*
Board of Appeal.

Attest:
FRED W. LUMIS, *Building Commissioner.*

"STEAM CURED CEMENT BLOCKS."

To Whom It May Concern:—

Part I, Section 12, of the Building Ordinance reads:—

"Methods of construction equivalent to those required by the provisions of this ordinance may be allowed with the written consent of the Building Commissioner and the Board of Appeal specifying the same."

In compliance with the authority thus conferred, the Board of Appeal has formulated and hereby establishes the following:—

SPECIFICATION.

Machine-made, steam-cured concrete blocks, when manufactured and cured in compliance with this specification, may be used in the erection of buildings in this city, on a parity with, or as a substitute for, "concrete building blocks," as described and provided for in the existing building ordinance.

The materials shall be a high-grade Portland cement, clean sharp sand, and clean fine gravel or crushed stone, mixed in the proportion of 1 part Portland cement, 2 parts sand, and 2 parts gravel, the gravel to run not coarser than ¼" or ⅜" in diameter, and a suitable proportion of clean water. All mixing of material shall be done in an approved mixing machine, and all blocks shall be molded in an approved block machine. The thickness of the shell or web in any such block shall be not less than one fourth of its height.

The blocks shall be steam-cured for 18 to 24 hours, then thoroughly sprinkled or sprayed daily for not less than 10 days. During this period they must be sheltered and protected from cold, sunlight, and the weather.

Such blocks or units shall be not less than 21 days old before being used in any building.

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Every block must bear a mark of identification.

Such blocks shall be tested at the expense of the manufacturer whenever the Building Commissioner so requires. The ultimate compressive test at 28 days shall be not less than 1,000 pounds per square inch on the gross sectional area.

The proportion of ingredients for mortar to be used in setting such blocks shall be approximately as follows:—

Portland cement, 100 pounds. Sharp sand, 2 cubic feet. Hydrated or slacked lime, 25 pounds. Water—a sufficient quantity.

Signed:

GEORGE C. GARDNER, *Chairman,*
THOMAS J. O'BRIEN,
DANIEL W. MELLEN,
Board of Appeal.

Attest:

FRED W. LUMIS, *Building Commissioner.*

CONCRETE BLOCKS.

Portland cement concrete blocks are now being made and used in large quantities. The quality of these blocks ranges from very good to very poor. At the present time there is in this city no device for testing such blocks. A suitable testing machine should be installed as quickly as possible, preferably in the Engineering Department, where such material can be tested.

Following is the report of the Board of Appeal.

Respectfully submitted,

FRED W. LUMIS,
Building Commissioner.

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REPORT

OF THE

BOARD OF APPEAL

SPRINGFIELD, MASS., December 28, 1921.

Honorable City Council, City of Springfield.

GENTLEMEN:—The Board of Appeal begs leave to submit herewith its annual report to your Honorable Body.

Three subjects have come before the Board during the year as noted below:—

Two to permit equivalent construction methods, one referring to the use of stucco on metal lath, and one to permit the use of steam-cured cement blocks.

The third, an appeal to permit the completion of a garage on Wilbraham road, was allowed by the Board.

Respectfully submitted,

GEORGE C. GARDNER,
D. W. MELLEN,
T. J. O'BRIEN,
Board of Appeal.

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DEPARTMENT OF LAW

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DEPARTMENT OF LAW

To the City Council:—

I hereby submit a report of the business done by the law department during the year 1921.

At the beginning of the year, according to the last previous report of the department, there were pending one hundred thirty-six cases and matters in which the city was a party, classified as follows:—

Land damage and water damage cases arising from the construction of the new water works in the hands of special counsel for the Board of Water Commissioners,	17
Petitions to reduce betterment assessments,	41
Land damage cases arising from the taking of lands for public improvements,	20
Actions of contract for collection of money due the city,	24
Actions of tort for personal injuries resulting from alleged defects in highways,	27
Matters before county commissioners,	3
Miscellaneous,	4
Total,	136

During the year forty-three cases have been begun by or against the city, classified as follows:—

Petition to reduce betterment assessments,	1
Land damage cases arising from the taking of land for public improvements,	22
Actions of tort for personal injuries resulting from alleged defects in highways,	12
Actions of contract for collection of money due the city,	2
Miscellaneous,	5
Petition for certiorari,	1
Total,	43

At the end of the year there were pending one hundred nine cases in which the city was a party, classified as follows:—

Land damage and water damage cases arising from the construction of the new water works in the hands of special counsel for the Board of Water Commissioners,	11
Petitions to reduce betterment assessments,	42

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Land damage cases arising from the taking of land for public improvements,	16
Actions of contract for collection of money due the city,	5
Actions of contract against the city for collection of money,	4
Actions of tort for personal injuries resulting from alleged defects in highways,	22
Petitions for damages resulting from the establishment of building lines,	3
Petition for certiorari,	1
Miscellaneous,	5
Total,	109

The last land damage case arising out of the Dwight street improvement, that of W. H. Nevins, has been adjusted substantially on the basis of the finding of the late James L. Doherty as auditor.

One case has been tried before a jury and one matter argued before the Supreme Judicial Court, and thirty-seven cases have been settled, or otherwise disposed of, including that of the New York, New Haven and Hartford Railroad Company for damages resulting from the widening of Water street.

Extensive preparations have been made for the trial of the Dwight street betterment cases, but an offer of adjustment has been made by this department, under authority of an order by the Board of Aldermen, which we believe will ultimately be accepted by all the parties included in it. There are now pending thirty-nine of these cases, including four duplications applying to the same land, the aggregate amount of the assessments involved therein being $455,264.00.

Two meetings of the Board on Claims have been held, at which thirty-three claims were considered. Eighteen of these were settled for sums aggregating $2,085.31, and fifteen claimants were given leave to withdraw.

Thirty-five written and numerous oral opinions have been rendered to the Mayor and other officials, boards, and committees, and the department has been represented by either the solicitor or the assistant solicitor at many conferences.

All necessary contracts, bonds, deeds, and other legal instruments and numerous orders and thirteen ordinances, have been drawn or examined and approved.

The solicitor has been over the entire new compilation of the ordinances and suggested many changes therein, both substantive and minor, which were approved by the committee in charge and are embodied in the ordinances as adopted.

During the first five months of the year the department devoted much

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time and effort to the fight against legislation proposed by the cities of Holyoke and Westfield by which they sought to be relieved of their special shares of the expense of the new bridge, as determined by the bridge commission and confirmed by the Supreme Judicial Court, and to that extent to impose additional burdens on Springfield and West Springfield. During that entire period the assistant solicitor, Capt. A. C. Fairbanks, remained constantly in Boston, with the exception of week-ends, and rendered invaluable service in helping to win the fight. His ability, with his previous experience as a member of the legislature, and the high esteem in which he is held by members with whom he formerly served, were potent factors, and he labored with a zeal, diligence, and sacrifice of personal comfort which cannot be too highly commended. In deserved tribute to him I wish to add that the same qualities have characterized his entire work in the department.

The city has also been represented by either the solicitor or the assistant solicitor at hearings in Boston before the Department of Public Utilities pertaining to improvements at the Union Station and the regulation of gas rates and a hearing before the State Highway Commission pertaining to the regulation of outdoor advertising, and at a hearing in Springfield before the municipal finance committee of the legislature on the petition of the city for authority to contract indebtedness for the extension of Taylor and Stafford streets.

The solicitor has devoted a great amount of time and work to an issue which arose early in the year relative to the finances of the school department, the question being whether they came within the scope of the municipal budget law. The solicitor was and still is of the opinion that the school department is as entirely subject to that law as any other department of the city's affairs, and finally at the instance of the Mayor, and with a majority of the members of the City Council as plaintiffs, brought a bill in equity in the Supreme Judicial Court to determine the question. The matter was argued before the full bench in September, but the Court has not yet rendered its opinion.

The solicitor has also participated in several hearings before the Board of Aldermen on charges preferred against police officers and a member of the fire department, who under the veterans' preference acts were entitled to such hearings.

Respectfully submitted,

JOSIAH DEARBORN,
City Solicitor.

December 31, 1921.

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PARK COMMISSIONERS

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REPORT

OF THE

PARK COMMISSIONERS

SPRINGFIELD, MASS., December 27, 1921.

To His Honor, the Mayor, and the City Council of the City of Springfield:—

As required by the revised laws of the Commonwealth of Massachusetts of 1902, Chapter 28, Section 13, entitled "Of Public Parks, Playgrounds and Public Domain," the Board of Park Commissioners of the City of Springfield have the honor to submit their thirty-ninth (39th) annual report for the year ending November 30, 1921.

The board was organized for the year with Stanhope E. Blunt, president, and Charles E. Ladd, secretary, the present members of the board being Stanhope E. Blunt, Nathan D. Bill, Theodor R. Geisel, Charles Adams, and Dwight R. Winter.

The past year has been one of the most satisfactory in the history of this department. In addition to a number of improvements which have been made, seven parcels of land have been added to this department during the year, making the number of parks and triangles under the control of this department sixty-eight (68), with a total acreage of 951.96 acres.

Below is a list of the new additions, and how they were acquired:—

The Five Mile Pond property was transferred to this department by a vote of the City Council upon a petition signed by a great number of the residents of Indian Orchard, requesting that this land be developed as a park. It is located on the northerly side of Boston road, and contains 21.8 acres. It has a considerable water frontage with excellent natural facilities for bathing, and it is our purpose to build a bathhouse at this place similar to the one built at Watershops Pond, and discontinue the one at Loon Pond, where the accommodations are inadequate to meet the needs of the public. It is also planned to further develop this park by building roads, planting trees and shrubs, and making such other improvements as will best serve the needs of this section of the city.

By vote of the City Council the large tract of land on the north side

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of West street, containing 12.6 acres, was transferred to this department. This land has been used for a public dumping ground for a number of years, and it would seem advisable to continue its use for this purpose until the entire field is filled to the grade of the street, after which a comprehensive plan for its development can be carried out.

The East Springfield Home Builders' Company, which has done so much toward developing this section of the city, very generously donated four parcels of land for park purposes. The following is a description of these parcels:—

East Springfield Park, located on Page boulevard, has a beautiful grove of hard-wood timber, principally oaks, a large pavilion for a shelter and other suitable buildings, all of which make ideal accommodations for picnic parties. This park contains 3.77 acres, and, with the addition of a few acres, an athletic field can be laid out, which will be greatly needed in the near future when this section of the city is more developed.

Rio Vista Park is located just off Page boulevard, lying between Bircham street and Second street. It contains 4.77 acres and is a very attractive natural park.

The two remaining parcels are small triangles on Page boulevard, partially developed.

Daniel C. Shea conveyed to the city by deed a large triangle at the intersection of Belmont avenue, Whittier street, and Longfellow terrace, for a public park under the following conditions: That it should be named "Mary A. Shea Park" in memory of his wife, and that it shall forever be used for a public park. When this triangle is improved it will make a very useful and attractive addition to this thickly settled residential section.

Among the improvements which were made the past year the following were some of the more important ones:—

A new cement walk was laid the entire length of the Sumner avenue frontage of the park, replacing the old tar concrete walk, which was in a very unsatisfactory condition. A considerable amount of road work was done during the year. The main drive through the park, which was built last year as far as the Magawisca road, was completed, extending to Pecousic avenue. This makes an excellent park drive the entire length of the park from Trafton road to Pecousic avenue. It is our purpose to improve our roads as much as possible each year. Nearly all of the remaining roads must be widened and many of the sharp curves reduced as far as possible in order to make them reasonably safe and comfortable for pleasure driving for which park roads are intended.

For some time the question of public sanitaries has caused this board

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considerable concern, and is one that has been the cause of some reasonable and just criticism on the part of the public. We have deferred from year to year any action on this matter, hoping that a sewer might be constructed sufficiently near to Forest Park into which the sanitaries could be entered. With no immediate prospect of such a sewer being built, we decided to experiment by substituting septic tanks in place of the sewer. This experiment has proved so very satisfactory that we hope that we may be able to build at least two more the coming year.

The tennis courts were resurfaced and kept in a very satisfactory condition considering the constant use to which these courts are subjected. The demand for tennis courts is steadily increasing and we are considering the possibility of building additional courts.

Baseball is even more popular than ever, and the great crowds which attend these games, especially on Saturdays and Sundays, have proved that the seating accommodations of the bleachers are altogether inadequate. We have already started to enlarge these bleachers, which will double the seating capacity, and also provide additional dressing rooms, shower baths, etc.

The Sunday band concerts, which were given in different sections of the city, were fairly well attended, although it was very apparent that ball games and other activities, which are now permitted on Sunday, attracted many who otherwise would have attended the concerts. Notwithstanding this we are strongly in favor of the Sunday concerts and urge that they be continued.

The Independence Day celebration at Forest Park was as usual a grand success. The attendance during the afternoon was fairly large, the visitors enjoying the ball games, tennis, and such other attractions as the park offered, while in the evening it was estimated that fully fifty thousand (50,000) people attended the fireworks. Everything passed off successfully and no accidents of any kind were reported to mar the events of the day, thus strongly proving the desirability of the "Safe and Sane Fourth." The quiet and orderly manner in which this great crowd was handled was the occasion of much favorable comment, and we feel that our six park officers and their assistants, all employees of this department, are entitled to great credit for the very efficient and courteous manner in which this work was done. During the year two new officers were appointed, making the total number of park officers eight. We feel that this number should be increased by the addition of two more men.

Possibly no one event among the activities of the year in this department has met with such universal approval from the public in general as the opening of the Barney House to the public. It was the expressed

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desire of Mr. Barney, and also incorporated in his will, that after his death his house should be used by the public for such purposes as the Park Commission might see fit to allow.

The Trustees of the Estate of Everett H. Barney, upon the request of this board, paid to the city treasurer the sum of ten thousand ($10,000) dollars to be placed to the credit of the Park Commissioners and to be designated as the Everett H. Barney Fund. This being the first money to be received from the estate of Mr. Barney, it seemed very fitting and proper that a portion of it at least should be used to make such changes in the house as would make it available for the use of the public. Elaborate plans calling for very radical changes in the house were carefully considered, but, on account of the cost and the time it would require to make these changes, it was decided to postpone them for the present and that some less expensive plan be adopted. The carpets and rugs on the main floor were replaced with linoleum, a long counter was built in the dining room, and other conveniences were added so as to equip this room for the sale of ice cream, soda, candy, cigars, etc. Some minor changes were made on the second floor, including cutting a door from the balcony into the large room known as the sun parlor, and making this room suitable for societies and small gatherings to hold meetings.

Mr. S. P. Burns was appointed custodian of the house, which was formally opened to the public about the middle of July. The people immediately availed themselves of this opportunity, and during the remainder of the summer and well into the fall the number of visitors was very large. The success of this undertaking far exceeded our expectations. We believe that much of this success is due to the efforts of Mr. and Mrs. Burns, who have demonstrated their fitness for this work.

The general business depression throughout the country, resulting in factories shutting down or running on part time, and with practically all lines of industry far below the normal, forcing many men out of employment, has created a condition that cannot be sidetracked but must be fairly and squarely faced. It is estimated that several thousand men in Springfield are out of work, many of them with large families, without money, and no visible means of support. And were it not for the very practical way in which Mayor Leonard is handling this situation, many families much against their wishes would become direct charges of the city. The plan adopted to provide work for the unemployed has made it possible for this department to use almost an unlimited number of these men, having at present more than three hundred of them.

It is generally conceded that when a city attempts to provide work for the unemployed, it proves very costly and the city gets little in return.

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This is not so with a very great majority of the unemployed we now have, for we feel that we are getting fair return for the money. On account of this extra help we have been able to make excellent progress on the boulevard drive. This drive has been graded to Converse street and more than half of this distance has been covered with cinders. The section of Converse street adjoining the park has been graded and more than one half the remaining drive has been graded. A part of the unemployed have been used in clearing up the woods, cutting out the dead trees, trimming out and removing the surplus underbrush, and making a very decided and noticeable improvement. Under ordinary conditions it would require several years to accomplish what the unemployed will do this winter.

Van Horn Reservoir Park has received considerable attention the past year. The athletic field was regraded, a ball field laid out with a clay infield, making one of the best ball diamonds in the city. In connection with the athletic field large covered bleachers to accommodate 1,200 persons were built, with dressing rooms and shower baths for the players. We hope to acquire the county land just south of the field, but as yet no satisfactory arrangements have been reached. With the addition of this land to the present athletic field, more ball fields can be laid out and provision made for such other activities as this section of the city requires.

Particular attention has been devoted to tree planting in this park. Several maples, oaks, and elms were planted at the entrance to the athletic field and along the Armory street frontage, while 3,000 evergreens were planted throughout the park, the majority being white and red pines, the remainder of balsam fir, hemlock, and white spruce.

FORESTRY.

We are pleased to report a very satisfactory year in this division of our work, notwithstanding the fact that fewer street trees were set this year than the average for the past four years. This was due to the fact that at the time of year for tree planting our men familiar with this work were occupied removing the trees for widening Liberty street from Chestnut street to Armory street. During the year 1,150 street trees were set out as against less than three hundred removed, and of this number 133 were removed on account of the Liberty street widening. While this ratio of trees set out with trees removed is very favorable, we feel that a policy of very generous tree planting should be continued for a term of years if satisfactory results for beautifying our city are to be realized.

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The trees of our city are in a very healthy and satisfactory condition, yet the fact should not be overlooked that "eternal vigilance" is the price of a healthy tree. Trees in many respects resemble the human body and are susceptible to disease, requiring constant care and attention to keep them healthy. During the year 1,400 Norway, rock, and silver maples were sprayed for scale, and more than 3,700 trees were sprayed for the fall web worm.

During the annual moth inspection, which is carried on by this department every year, 68 egg clusters of the gypsy moth were found within the limits of Springfield. And while it is very possible that some egg clusters were overlooked by the inspectors, when we realize that each egg cluster contains from 300 to 500 eggs, it is very apparent what the result might have been had these clusters been overlooked, or what would be even more to be regretted, that no inspection was made. Preventive measures are absolutely imperative, for once the gypsy moth gets a foothold, the cost of fighting and controlling it will be very great.

RECREATION.

Public recreation is one of the very essential functions of the municipality. While only a few years ago the suggestion of using the public funds for any recreational activities for the public would have received little or no consideration, yet today public recreation is recognized not only as a legitimate function but also one of the very necessary requirements of a city.

The past year has been a very satisfactory one. It has been our purpose to provide some kind of recreational activity for all seasons of the year. The playgrounds and parks during the summer months offer opportunities for enjoying and participating in healthful out-of-door games, while during the winter months the Social Centers and the several rinks distributed throughout the city offer ample opportunities for wholesome exercise and recreation. During the year fourteen playgrounds, two swimming pools, and eight Social Centers were in operation and were unusually well attended.

The urgent need for more playgrounds in many sections of the city is very apparent, and we trust that the planning commission, in its survey of the needs of the city along this line, will have recommendations to offer which will include ample provision for additional recreational facilities for all parts of the city. Further postponement of this matter means greater cost later on.

By a ruling of the Civil Service Commission of the state all instructors

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on playgrounds must pass a competitive examination, and all appointments to such positions must be made from an eligible list furnished by the commission. This is an unreasonable and unfair ruling, for it will deprive us of the services of many of our most competent and efficient workers. Many of these will be unable to take the examination on account of being out of the city attending college, while others positively refuse to take the trouble to take a competitive examination for a position which furnishes only ten weeks' employment in the year and at a very meager salary. The inconsistency of this ruling is all the more forcibly brought to our attention by the fact that the lifeguards at the swimming pools, whose duties are of such a nature that the utmost care should be exercised in selecting competent persons for such positions, are exempt from examinations of any description.

The work of this department is increasing so rapidly that we have been obliged to appoint a man to have charge of the recreation. Mr. James S. Stevens, a graduate of Springfield Y. M. C. A. College, who has had a number of years' experience in recreational work, has been appointed to this position. He is very keenly interested in his work and will prove a valuable help to this department.

Below is a financial statement showing the appropriations, receipts, and disbursements for the year:—

GENERAL FUNDS.

RECEIPTS.

Appropriation,	$243,645.00	
Transfers and Refunds:—		
Sundry Accounts,	1,530.03	
Reserve Fund,	1,000.00	
		$246,175.03

EXPENDITURES.

Parks, Administration,	$35,208.51		
Operation,	177,735.06		
		$212,943.57	
Playgrounds, Administration,	$1,004.36		
Operation,	22,786.11		
		23,790.47	
Drinking Fountains,		623.49	
New Equipment,		8,728.19	
		$246,085.72	
Balance to City Treasurer,		89.31	
			$246,175.03

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FROM DEPARTMENT OF UNEMPLOYED RELIEF.

Receipts,	$12,588.78
Expenditures,	12,588.78

FOREST PARK EXTENSION.

RECEIPTS.

Appropriation,	$10,000.00

EXPENDITURES.

Land,	$2,384.60	
Sundry Accounts,	1,510.50	
Balance to 1922,	6,104.90	
		$10,000.00

EAST SPRINGFIELD PARKS.

RECEIPTS.

Appropriation,	$3,368.00

EXPENDITURES.

East Springfield Home Builders' Company,	$3,368.00

GERRISH PARK FUND.

Balance from 1920,	$586.01

SPECIAL FUNDS.

Porter Lake Fund.

RECEIPTS.

Balance from 1920,	$7,743.14

EXPENDITURES.

Engineering services,	$339.23	
Balance to 1922,	7,403.91	
		$7,743.14

E. H. Barney Special Fund.

RECEIPTS.

Trustees E. H. Barney estate,	$10,000.00	
Sales,	780.92	
		$10,780.92

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EXPENDITURES.

Remodeling and repairs, furniture, fixtures, etc.,	$2,990.33	
Merchandise,	772.59	
Balance to 1922,	7,018.00	
		$10,780.92

Gurdon Bill Fund.

RECEIPTS.

Balance from 1920,	$3,414.92	
Interest,	136.60	
		$3,551.52

William H. Smith Fund.

RECEIPTS.

Balance from 1920,	$714.57	
Interest,	28.58	
		$743.15

Charles S. Marsh Fund.

RECEIPTS.

Balance from 1920,	$362.87	
Interest,	14.51	
		$377.38

STANHOPE E. BLUNT,
NATHAN D. BILL,
THEO. R. GEISEL,
CHARLES ADAMS,
DWIGHT R. WINTER,
Board of Park Commissioners.

CHARLES E. LADD, *Secretary.*

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REPORT

OF THE

BOARD OF LICENSE COMMISSIONERS

SPRINGFIELD, MASS., March 27, 1922.

To the City Council of the City of Springfield:—

The Board of License Commissioners beg to submit their report for the year ending November 30, 1921.

Meetings were held on February 21, April 13, April 29, May 12, May 25, May 27, June 3, and November 23.

During the year the following licenses were granted: Special Sunday Licenses, 194; Common Victualers' Licenses, 141; Innholders' Licenses, 15; Third Class Druggists' Licenses, 27; Seventh Class Druggists' Licenses, 1; Lodging House Licenses, 189.

Respectfully submitted,

WM. M. STEVENSON, *Chairman.*

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CITY CLERK'S REPORT

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CITY CLERK'S REPORT

CITY CLERK'S OFFICE, ADMINISTRATION BUILDING,
January 9, 1922.

To the City Council of the City of Springfield:—

I herewith submit the following report for the year ending November 30, 1921.

The amount of fees received by me for official services, from December 1, 1920, to December 1, 1921, is as follows, said sum having been paid by me to the City Treasurer:—

For marriage certificates,	$1,276.00
For recording and indexing marriage records,	7.00
For recording and indexing dog licenses,	571.60
For recording and indexing combination, fishing, and trappers' licenses,	1,065.90
For recording physicians' certificates,	9.75
For copies of record,	395.20
For itinerant vendors' licenses,	151.90
For recording and indexing the following papers:—	
Agreements,	6.00
Assignments,	98.00
Voluntary assignments,	20.00
Bills of sale,	761.40
Discharges,	235.50
Leases,	193.40
Married women's certificates,	24.50
Mortgages on personal property,	1,975.05
Notices,	1.00
Notices of foreclosure,	12.30
Oil certificates,	3.50
Powers of attorney,	2.30
Interest,	70.16
Witness fees	5.05
	$6,885.51

There has been paid to the County Treasurer the sum of $6,788.40, being the amount due the County of Hampden for dog licenses, less fees for recording, from December 1, 1920, to December 1, 1921.

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The sum of $4,533.10, amount due for two combination hunting and fishing licenses at $15 each, seven combination hunting and fishing licenses at $10 each, 3,785 combination hunting and fishing licenses at $1 each, 128 fishing licenses at $1 each, 3,160 fishing licenses at $0.50 each, and 24 trapping licenses at $0.25 each, less fees for recording, has been paid to the State.

CLIFFORD F. SMITH,
Assistant City Clerk.

SPRINGFIELD MASS., January 9, 1922.

I hereby certify that the foregoing report of the City Clerk is correct, as per his records and receipts on file in his office.

CLIFFORD E. COOK, *City Auditor.*

The number of marriage intentions filed during the year is.....	1,274
The number of marriages for the year is.....	1,525
The number of deaths for the year is.....	1,859
The number of births for the year is.....	3,750

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VOTERS AND REGISTRATION.

The following table shows the number of men and women who registered as voters in 1920 and 1921:—

1920.					1921.				
Ward	Precinct	Men	Women	Total	Ward	Precinct	Men	Women	Total
1	A	137	331	468	1	A	28	6	34
1	B	128	354	482	1	B	22	6	28
1	C	85	310	395	1	C	22	5	27
1	D	60	312	372	1	D	24	7	31
2	A	83	169	252	2	A	26	9	35
2	B	68	155	223	2	B	39	15	54
2	C	77	199	276	2	C	44	20	64
2	D	70	274	344	2	D	49	21	70
2	E	69	289	358	2	E	33	8	41
3	A	62	75	137	3	A	15		15
3	B	126	248	374	3	B	21	3	24
3	C	71	267	338	3	C	25	5	30
3	D	79	225	304	3	D	27	5	32
4	A	109	509	618	4	A	27	27	54
4	B	127	385	512	4	B	39	76	115
4	C	113	372	485	4	C	15	23	38
4	D	100	432	532	4	D	18	7	25
5	A	125	479	604	5	A	19	10	29
5	B	64	401	465	5	B	12	15	27
5	C	79	418	497	5	C	9	4	13
5	D	135	500	635	5	D	22	19	41
6	A	77	169	246	6	A	20	2	22
6	B	65	258	323	6	B	9	10	19
6	C	89	587	676	6	C	17	16	33
6	D	95	449	544	6	D	13	8	21
7	A	103	426	529	7	A	18	8	26
7	B	58	366	424	7	B	13	6	19
7	C	88	444	532	7	C	16	9	25
7	D	150	556	706	7	D	16	6	22
8	A	95	214	309	8	A	27		27
8	B	97	335	432	8	B	15	10	25
8	C	92	442	534	8	C	12	8	20
8	D	123	526	649	8	D	15	10	25
8	E	77	323	400	8	E	16	2	18
8	F	112	183	295	8	F	12	1	13
		3,288	11,982	15,270			755	387	1,142

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The following table shows the number of assessed polls and the number of men and women on the voting list at the city elections December, 1920 and 1921:—

1920.					1921.			
Ward	Precinct	Assessed Polls	Men	Women	Ward	Precinct	Assessed Polls	Voters
1	A	1,448	730	331	1	A	1,560	985
1	B	1,235	760	369	1	B	1,186	1,013
1	C	1,175	658	323	1	C	1,193	989
1	D	887	584	323	1	D	957	874
2	A	1,224	542	185	2	A	1,212	694
2	B	1,442	560	166	2	B	1,411	713
2	C	2,420	615	206	2	C	2,196	680
2	D	1,159	643	282	2	D	1,121	972
2	E	1,001	616	307	2	E	1,008	900
3	A	675	381	77	3	A	774	392
3	B	1,236	590	283	3	B	1,244	757
3	C	918	453	298	3	C	1,043	709
3	D	1,514	559	256	3	D	1,411	765
4	A	1,029	683	561	4	A	1,067	1,198
4	B	1,231	802	396	4	B	1,324	1,235
4	C	1,063	641	389	4	C	1,076	997
4	D	1,000	671	471	4	D	957	1,075
5	A	1,324	721	529	5	A	1,306	1,174
5	B	681	563	493	5	B	686	1,033
5	C	752	453	469	5	C	785	1,017
5	D	1,241	751	576	5	D	1,165	1,254
6	A	1,244	519	172	6	A	1,202	661
6	B	850	508	292	6	B	864	784
6	C	1,021	756	636	6	C	1,008	1,328
6	D	868	647	479	6	D	848	1,065
7	A	1,186	815	439	7	A	1,212	1,164
7	B	813	595	381	7	B	851	969
7	C	1,109	801	452	7	C	1,197	1,269
7	D	1,328	1,056	578	7	D	1,513	1,680
8	A	913	495	221	8	A	921	751
8	B	1,005	616	352	8	B	1,009	954
8	C	910	638	471	8	C	848	1,085
8	D	1,281	908	538	8	D	1,491	1,501
8	E	1,080	602	329	8	E	998	900
8	F	1,597	499	185	8	F	1,469	664
		39,810	22,426	12,815			40,113	34,101

Respectfully submitted,

CLIFFORD F. SMITH,

Assistant City Clerk.

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JURY LIST

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CITY OF SPRINGFIELD.

LIST OF JURORS, 1921.

NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Abbe, Fred A.,	396 Orange st.,	Coal Dealer, 396 Orange st.
Abbe, Clifford T.,	17 Commonwealth ave.,	Manager, 151–157 Bridge st.
Abbe, Ralph H.,	8 Vermont st.,	Clerk, 195 State st.
Abbott, Clarence M.,	44 Larkspur st.,	Insurance Clerk, 317 Main st.
Adams, Charles F.,	90 Westminster st.,	Druggist, 54 Walnut st.
Adams, John J.,	141 Massachusetts ave.,	Jeweler, 288 Bridge st.
Adams, John Quincy,	1750 North st.,	Chief Electrician, Bosch Magneto Co., North Main st.
Adams, Joseph,	165 East st., I. O.,	Machinist, Pine st., I. O.
Adams, Robert W.,	115 Mill st.,	Manager, 16 Sanford st.
Adams, William A.,	608 Dickinson st.,	Bookkeeper, 495 Main st.
Addison, William,	14 Vernon st.,	Contractor, 22½ Court st.
Ager, J. Francis,	32 Byers st.,	Dentist, 476 Main st.
Aggas, Reed R.,	28 Westford ave.,	Superintendent, 387 Main st.
Ahern, Cornelius F.,	148 Eastern ave.,	Rigger, 938 Belmont ave.
Ahern, Thomas P.,	34 Worcester ave.,	Chauffeur, 34 Worcester ave.
Ahrens, William,	41 Daytona st.,	Motorman, 7 North Main st.
Akerman, Louis E.,	91 Grenada ter.,	Tire Merchant, 72 Worthington st.
Albano, Frank,	18 Gardner st.,	Chauffeur, 77 Wilcox st.
Alden, Elbert W.,	62 Pearl st.,	Salesman, 326 Main st.
Aldrich, Leland M.,	50 Buckingham st.,	Clerk, 385 Main st.
Aldrich, Raymond H.,	1130 State st.,	Clerk, Unemployed.
Allen, Asher,	42 Spruceland ave.,	Manager, 32 Cypress st.
Allen, Charles,	21 Underwood st.,	Purchasing Agent, 662 North Main st.
Allen, Ethan,	133 Massachusetts ave.,	Expressman, 133 Massachusetts ave.
Allen, Sheldon F.,	76 Bay st.,	Clerk, 63 Elm st.
Alvord, Edward B.,	19 Albemarle st.,	Retired.
Ambrose, Robert J.,	27 Monroe st.,	Receiving Clerk, 31 Harrison ave.
Ames, Herbert L.,	15 Sachem st.,	Credit Manager, 390–396 Main st.
Anamier, Daniel H.,	17 Waverly st.,	Janitor, Cor. Humphrey and McKinley ave., Chicopee.
Anderson, Allen H.,	W. S. Fullerton st.,	Station Operator, 73 State st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Anderson, Edmund C.,	122 Amherst st.,	Clerk, 296 Hancock st.
Anderson, Samuel J.,	37 Demond ave.,	Janitor, 168 Birnie ave.
Andrews, Arthur A.,	30 Marlborough st.,	Carpenter, 285 High st., Holyoke.
Andrews, Ernest,	28 Shawmut ave.,	Garage Owner, 316 Park st., West Springfield.
Angers, George Arthur,	129 Trafton road,	Contractor, 327 Main st.
Angers, Joseph A.,	N. S. Tinkham road,	Lumber Dealer, 363 Eastern ave.
Anthony, Lewis A.,	66 Montrose st.,	Foreman, B. & A. Shops, West Springfield.
Armitage, Walter E.,	397 Birnie ave.,	Machinist, B. & M. R. R. Co.
Armitage, Wilfred S.,	758 Carew st.,	Carpenter, 758 Carew st.
Armstrong, Robert Joseph,	80 Clantoy st.,	Foreman, Front st., Chicopee Falls.
Arndt, Charles,	88 Bliss st.,	Furniture Finisher, 538 Main st.
Arnold, Arthur M.,	253 North Main st.,	News Dealer, 247 North Main st.
Arnold, Clarence H.,	53 Euclid ave.,	Watch Maker, 418 Main st.
Aronson, Joseph,	68 Forest Park ave.,	Gents' Furnishings, 535 Main st.
Asher, Frank A.,	29 Arch st.,	Salesman, J. Hungerford Smith, Rochester, N. Y.
Ashley, John H.,	119 Mulberry st.,	Real Estate Broker, 307 Main st.
Ashton, George A., Jr.,	19 Cortland st.,	Retired.
Atchinson, Walter B.,	172 Oak st., I. O.,	Electrical Engineer, Pine st., I. O.
Atherton, John A.,	12 Margaret st.,	Chauffeur, 61 Taylor st.
Atkinson, James H.,	67 Alden st.,	Cabinet Maker, 349–359 Main st.
Atkinson, Thomas I.,	48 Allen st.,	Telegraph Operator, B. & A. R. R. Co.
Attleton, Edward L.,	50 Boston road,	Profiler, 39 Stockbridge st.
Auerbach, Harry,	26 Commonwealth ave.,	Upholsterer, 34 Harrison ave.
Austin, Reuben G.,	17 Litchfield st.,	Insurance Agent, 317 Main st.
Avery, James H.,	24 Myrtle st.,	Cutter, U. S. Envelope Co.
Avery, Napoleon,	71 Roseland st.,	Tool Maker, 29 East Court st.
Avezzie, Thomas T.,	21 Chapel st.,	Salesman, 64–82 Napier st.
Ayres, Harry A.,	9 Grant st.,	Receiving Clerk, Superior place.
Axtell, Charles S.,	27 Wellesley st.,	Printer, 17 Worthington st.
Babcock, William W.,	79 James st.,	Grocery Clerk, 430 Chestnut st.
Bailey, John,	9 Oakland st.,	Register Reader, 7 North Main st.
Bailleuil, James Henry,	Round Hill,	Traffic Manager, Stevens-Duryea Co., Willimansett.
Baily, Hubert C.,	87 Buckingham st.,	Retired.
Baker, Asa G.,	6 Cornell st.,	Book Publisher, 10 Broadway.
Baker, John Louis,	117 Daviston st.,	Salesman, 340 Bridge st.
Baker, Nicholas J.,	50 Northampton ave.,	Machinist, 837 State st.
Baker, Robert E.,	22 Forest st.,	Salesman, 22 Forest st.
Baker, William G.,	127 Spring st.,	Com. Traveler, Swain Earle Co., Boston.
Baldwin, Fred W.,	855 Liberty st.,	Electrician, Pine st., I. O.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Baldwin, Henry P.,	15 Lenox st.,	Manager, 499 Sumner ave.
Baldwin, Howard M.,	50 Buckingham st.,	Butcher, 457 State st.
Ball, Herbert A.,	51 Sargeant st.,	Bookkeeper, Ludlow Mfg. Co., Ludlow.
Ball, Henry A.,	256 Tyler st.,	Machine Operator, Page blvd.
Bangs, Arden E.,	103 Dawes st.,	Mason, 103 Dawes st.
Barber, Clarence W.,	21 Lyndale st.,	Manager, Atlantic & Pacific, Hartford, Conn.
Bardwell, Herbert P.,	80 Harrison ave.,	Clerk, 21 Cypress st.
Barker, Winfred W.,	421 Armory st.,	Compositor, 32 Cypress st.
Barnes, Eugene H.,	6 Geraldine court,	Porter, 282 Main st.
Barnes, Louis S.,	16 Carlisle st.,	Broker, T. C. Perkins Co., Hartford, Conn.
Barnett, Robert Cook,	61 Quebec st., I. O.,	Foreman, Fiberloid Co., Worcester st., I. O.
Barrett, Charles F.,	200 Massachusetts ave.,	Traveling Salesman, 89 Logan st.
Barrett, James F.,	59 James st.,	Express Business, 315 Bridge st.
Barrett, Lawrence N.,	135 Spring st.,	Treasurer, 66 Taylor st.
Barrett, Merrick C.,	45 Bay st.,	Manager, 600 State st.
Barrett, Michael J.,	41 Bancroft st.,	Employment agent, Front st., Chicopee Falls.
Barrett, Thomas J.,	74 Alexander st.,	Compositor, 279 Dwight st.
Barrett, Walter M.,	71 Lyndale st.,	Yard Conductor, B. & M. R. R. Co.
Barrett, William D.,	74 Alexander st.,	Filer, Bosch Magneto Co., North Main st.
Barry, John W.,	10 Prospect ter.,	Insurance Agent, 374 Main st.
Bartlett, Leon E.,	40 Scott st.,	Chief Clerk, 500 Main st.
Barton, Homer R.,	140 Buckingham st.,	Auto Repairman, Page blvd.
Barton, Robert,	29 Bedford Rd.,	Manager, 500 Main st.
Barttro, Arthur W.,	136 Bowles st.,	Repairman, 391 North Main st.
Batchelder, Guy A.,	34 Berkeley st.,	Draftsman, Unemployed.
Batchelder, Herman W.,	15 Crystal ave.,	Manager, 176 Bridge st.
Bates, Clarence A.,	94 Catharine st.,	Motorman, 7 North Main st.
Bates, Ernest G.,	10 Berkeley st.,	Plumber Inspector, 36 Court st.
Bates, Waldo H.,	138 Firglade ave.,	Vice-president, 902 South Main st.
Bath, Ralph S.,	214 North Main st.,	Clerk, 387 Main st.
Bausman, George A.,	78 Atwater ter.,	Treasurer, 662 North Main st.
Baxter, Paul L.,	745 Carew st.,	Tire Maker, Front st., Chicopee Falls.
Beach, Willis A.,	55 Marlboro ave.,	Traveling Salesman, 44 Commercial Wharf, Boston.
Beadle, Fred A.,	180 Maple st.,	Electrician, 837 State st.
Beahn, James F.,	873 Armory st.,	Contractor, 873 Armory st.
Beals, Frank W.,	530 Sumner ave.,	Inspector, 39 Stockbridge st.
Beardsley, Charles T.,	37 Bancroft st.,	Carpenter, 4 Birnie ave.
Beauchemin, John A.,	44 Bond st.,	Business Agent, 21 Sanford st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Beaulieu, Delmose J.,	33 Clayton st.,	Cigar Maker, Railroad row.
Beckwith, Leon A.,	162 Kensington ave.,	Plumbing Contractor, 378 Dickinson st.
Beckwith, William,	37 Marlboro ave.,	Draftsman, Page blvd.
Belcher, Fred L.,	20 Rupert st.,	Purchasing Agent, 35–39 State st.
Belcher, John W.,	9 Keith st.,	Clerk, 8 Montgomery st., Chicopee Falls.
Belden, Frank H., Jr.,	71 Firglade ave.,	Cashier, Front st., Chicopee Falls.
Belden, William E.,	27 Rutledge ave.,	Inspector, 39 Stockbridge st.
Belenky, Robert,	71 Prospect st.,	Merchant, 290 Chestnut st.
Bell, James H.,	21 Sylvan st.,	Manager, 25 Pomona st.
Bell, John A.,	361 Eastern ave.,	Barber, Cor. Main and Worthington sts.
Bellamy, Thomas A.,	287 Fulton st.,	Boiler Maker, B.&A.R.R. Shops, West Springfield.
Bellows, Henry W.,	60 Harvey st.,	Draftsman, Not Employed.
Bemis, Charles A.,	31 Northampton ave.,	Assistant Treasurer, 30 Lyman st.
Bemis, Frank A.,	107 Garfield st.,	Clerk, 30 Lyman st.
Bemis, William C.,	22 Cherryvale ave.,	Clerk, Worcester st., I. O.
Bengle, Victor N.,	234 Oak st., I. O.,	Salesman, Chapman Valve Co., 203 Hampshire st., I. O.
Bennett, John C:,	15 Dunmoreland st.,	Manager, 118 Fisk ave.
Benson, Raymond E.,	164 Alden st.,	Bookkeeper, 195 Alden st.
Benton, John H.,	337 Central st.,	Printer, 35 Dwight st.
Benton, Wrayburn M.,	60 Hollywood st.,	Inspector, 500 Main st.
Berriman, Walter S.,	28 Myrtle st.,	Proprietor, 20 Willow st.
Berry, Robert,	152 Allen st.,	Blacksmith, 454 Walnut st.
Bettigole, Benjamin,	62 Howard st.,	Merchant, 554 Main st.
Bible, John F.,	79 Bond st.,	Assembler, 837 State st.
Bidwell, Frank H.,	98 Hall st.,	Mechanic, 39 Stockbridge st.
Bigelow, William W.,	624 State st.,	Civil Engineer, Lockwood S. Green, Boston.
Biggins, Michael C.,	254 Pearl st.,	Salesman, Morris Co., Holyoke.
Bill, Arthur,	29 Newman st.,	Retail Shoe Man, 501 Main st.
Billings, Edwin C.,	405 Bay st.,	Laborer, 120 Oakland st.
Bills, Philip H.,	82 Benton st.,	General Accountant, Ft. Church st., West Springfield.
Bishop, Charles M.,	51 Clarendon st.,	Chief Clerk, 383 Main st.
Blackmer, Elmer J.,	122 Benton st.,	Decorator, 54 Pine st.
Blague, Giles,	36 Marengo Park,	Insurance Agent, 476 Main st.
Blaine, Alger P.,	3 Hampden st., I. O.,	Agent, Board of Health, 36 Court st.
Blaine, Louis, Jr.,	S. S. South st.,	Engineer, Electric Light Station. Indian Orchard.
Blaine, William,	71 Oak st., I. O.,	Inspector, 73 State st.
Blake, Herbert P.,	135 Westford Ave.,	Buyer, 495 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION
Blake, William E.,	44 Buckingham st.,	Treasurer, 56 Tyler st.
Blanchard, Charles C.,	199 Sumner ave.,	Insurance Agent, 356 Main st.
Blanchard, Edward J.,	805 Main st.,	Painter and Paper Hanger, 621 Main st.
Blanchard, Fay L.,	270 Pearl st.,	Druggist, 194–196 Main st.
Blanchard, Henry F.,	126 Forest Park ave.,	Treasurer, 40 Napier st.
Blanchard, Wilfred R.,	372 North Main st.,	Jitney Driver, 372 North Main st.
Blauvelt, Frederick E.,	28 Fort Pleasant ave.,	Watchman, Plainfield st.
Bliss, Edgar C.,	55 Dresden st.,	Clerk, 211 Main st.
Bliss, Elisha F.,	31 Clarendon st.,	Stock Keeper, Unemployed.
Bliss, Ernest L.,	48 Palmer ave.,	Clerk, 348 Main st.
Bliss, Herbert P.,	40 Scott st.,	Steam Fitter's Helper, Gas Light Co., Water st.
Blodgett, Charles A.,	60 Monmouth st.,	Manager, 27 Harrison ave.
Blodgett, Charles A.,	128 Maplewood ter.,	Merchant, 162 Chestnut st.
Blood, Lucius M.,	20 Osgood st.,	Sheet Metal Worker, 34 Main st.
Bly, Wilson H.,	32 Longfellow ter.,	Manufacturer, Page blvd.
Blythe, William A.,	38 Ringgold st.,	Conductor, 7 North Main st.
Boedeker, Albert,	343 Hancock st.,	Bookkeeper, 10 Broadway.
Bolles, Henry Edwin,	14 Clifton ave.,	Meter Installer, 73 State st.
Bond, Edward H.,	112 Massachusetts ave.,	Salesman, 311–313 Main st.
Bond, Karl I.,	55 Saratoga st.,	Clerk, 500 Main st.
Bosworth, Charles F.,	28 Clarendon st.,	Clerk, 500 Main st.
Bosworth, George F.,	15 Newbury st.,	Repairman, Ft. Church st., West Springfield.
Bouchard, Ulysse Peter,	118 Gilbert ave.,	Carpenter, Page blvd.
Bouvier, Adelard J.,	37 Beacon st.,	Machine Operator, 837 State st.
Bowen, Hugh F.,	124 Greene st.,	Chauffeur, Cor. Liberty & Charles sts.
Bowman, George W.,	83 Elm st.,	Carpenter, Not Employed.
Bower, Charles R.,	38 Arch st.,	Instructor, 39 Stockbridge st.
Bowie, Robert J.,	23 Centre st., I. O.,	Foreman, Front st., Chicopee Falls.
Boyer, Lewis K.,	28 Whittier st.,	Foreman, B. & A. Work Shops, West Springfield.
Boyer, William N.,	104 North Main st.,	Meat Cutter, 354 Bridge st.
Boyle, Vincent J.,	51 Bloomfield st.,	Electrician, 387 Main st.
Bozenhard, Frank A.,	35 Demond ave.,	Foreman, 97 Wason ave.
Bracken, William,	677 Carew st.,	Inspector, Hinsdale Smith Co., Feeding Hills.
Bradford, George C.,	23 Winthrop st.,	Assistant Auditor, 500 Main st.
Bradley, Fred A.,	62 Bancroft st.,	Machinist, opp. Center Depot, Chicopee.
Bradley, Raymond Gordon,	Edgemere road,	Electrician, 319 Bridge st.
Bradshaw, Roy H.,	98 Benton st.,	Salesman, Supply Co., Columbus, O.
Bradway, Foster H.,	71 Avon place,	Clerk, 23 State st.
Brady, James B.,	105 Dickinson st.,	Electrical Engineer, 332 Dwight st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Brault, Albert L.,	69 Sorrento st.,	Plumber, 69 Sorrento st.
Bray, William J.,	130 Washington road,	Printer, 83 Hillman st.
Brayman, Edwin W.,	72 Crystal ave.,	Real Estate Dealer, 264 Main st.
Brearley, John,	553 Union st.,	Clerk, 500 Main st.
Brenner, William F.,	133 Carew st.,	Shipping Clerk, 57 Hillman st.
Breslin, Edward T.,	41 Dresden st.,	District Plant Chief, 283–295 Worthington st.
Brewer, F. Herbert,	12 Burlington st.,	Machinist, 39 Stockbridge st.
Bridgman, Harry S.,	15 Berkeley st.,	Secretary, Valley Paper Co., Holyoke.
Briggs, George D., Jr.,	W. S. Parker st.,	Ice Dealer, W. S. Parker st.
Brittain, William H.,	93 Sunapee st.,	Band Instructor, 93 Sunapee st.
Broderick, Eugene A.,	30 Lillian st.,	Monument Dealer, 523–527 State st.
Bronson, Clement L.,	408 Plainfield st.,	Unemployed.
Brooks, Amos R.,	21 Carlisle st.,	Electrician, 73 State st.
Brooks, George B.,	367 Belmont ave.,	Foreman, 120 Oakland st.
Brooks, Walter J.,	333 Eastern ave.,	Paper Hanger, 140 State st.
Broughton, Robert N.,	151 Sherman st.,	Druggist, 155 Sherman st.
Brouilette, Albert G.,	11 Maynard st.,	Salesman, 31–45 Hampden st.
Brown, Frank,	rear 35 Howard st.,	Bookbinder, Not Employed.
Brown, James T.,	42 Biltmore st.,	Assistant Manager, Cor. Main and Worthington sts.
Brown, Lloyd D.,	25 Harrison ave.,	Manager, 25 Harrison ave.
Brown, W. Chapman,	35 Amherst st.,	Foreman, 417 Liberty st.
Brown, Wallace E.,	39 Grant st.,	Manager, 289 Main st.
Brown, Warren E.,	10 Wendell place,	Clerk, Page blvd.
Brown, William,	86 Charles st.,	Lamp Lighter, B. & A. R. R. Co.
Bruce, Archie E.,	24 Allen st.,	Foreman, 151–157 Bridge st.
Brunelle, Hector,	34 Mattoon st.,	Jeweler, 236 Worthington st.
Brunton, James,	5 Butler st.,	Teamster, 331 Liberty st.
Bryson, John,	7 Pomona st.,	Salesman, 71–73 Worthington st.
Buckbee, Harry D.,	108 Byers st.,	Department Manager, 361 Dwight st., Holyoke.
Buckley, John P.,	412 Armory st.,	Plumber, rear 589 Liberty st.
Buffington, George H.,	63 Beaumont st.,	Grocer, 157 Hancock st.
Bullard, Glenn M.,	38 Bristol st.,	Purchasing Agent, Worcester st., I. O.
Burdette, Arthur D.,	228 Allen st.,	Wood Worker, 89 Logan st.
Burdick, Clifford S.,	10 Chestnut st.,	Salesman, 3 Post Office Square.
Burdick, Pliny F.,	35 Harvard st.,	Clerk, 500 Main st.
Burgess, Chauncy J.,	249 Walnut st.,	Cigar Maker, Railroad row.
Burke, James C.,	96 Bancroft st.,	Skilled Workman, 38 Walter st.
Burke, John Frances,	110 Cedar st.,	Steam Fitter, Page blvd.
Burke, Karl F.,	64 Grosvenor st.,	Window Dresser, 440 Main st.
Burke, Nicholas J.,	566 Carew st.,	Sheet Metal Worker, Columbia ter.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Burke, William,	90 Winchester Chambers,	Sheet Metal Worker, 837 State st.
Burke, William E.,	62(B) Vernon st.,	Night Watchman, Page blvd.
Burlingame, Lawrence D.,	30 Monmouth st.,	Auto Dealer, 642 State st.
Burlingame, Morris C.,	62 Maynard st.,	Traveling Salesman, Bankers Savings & Credit System.
Burnham, Erastus D.,	104 Buckingham st.,	Farmer, South Windsor, Conn.
Burns, Charles E.,	207 Belmont ave.,	Manager, 17 Worthington st.
Burns, George W.,	21 Ozark st.,	Salesman, 37 Harrison ave.
Burns, Oscar,	584 Worthington st.,	Clerk, 287 Main st.
Burt, Charles W.,	298 Union st.,	Advertising, 292 Main st.
Burt, James H.,	38 Porter ave.,	Inventor, New York, N. Y.
Busch, Charles R.,	103 Clayton st.,	Drop Forger, 38 Walter st.
Busch, Harry F.,	16 Berkshire st., I.O.,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Bushey, Fred,	276 Main st., I.O.,	Superintendent, 203 Hampshire st., I.O.
Buss, Fred E.,	26 Greenacre square,	Commercial Artist, 21 Worthington st
Buzzell, Roscoe W.,	155 Belmont av.,	Manufacturer, 125 Dwight st.
Byrnes, Mathew J.,	1329 North st.,	Clerk, B. & A. R. R. Co.
Caffrey, John J.,	2 Gerrish court,	Collector, 219 Worthington st.
Cahill, Francis J.,	77 Bond st.,	Bookkeeper, 41 Cypress st.
Cahill, William E.,	77 Bond st.,	Clerk, B. & A. Freight Office, Charles st.
Cain, Albert S.,	18 Freeman ter.,	Tailor, 627 Main st.
Calderwood, Herbert H.,	3 Sorrento st.,	Salesman, 34 Hampden st.
Caldwell, Edgar P.,	29 Gordon st.,	Bookkeeper, American Writing Paper Co., Holyoke.
Campbell, Richard C.,	60 Virginia st.,	Optician, 23 Harrison ave.
Cannizzaro, Charles,	Ambrose st.,	Barber, 12 Walnut st.
Cannon, John P.,	49 Linden st.,	Claim Adjuster, 274 Main st.
Canty, John R.,	56 Roseland st.,	Foreman, Holyoke Card & Paper Co., Fisk ave.
Canty, Paul E.,	77 Prospect st.,	Inside Wire Man, Not Employed.
Carey, Herbert W.,	26 Monmouth st.,	Superintendent, 89 Logan st.
Carey, Patrick,	226 Armory st.,	Teamster, 417 Liberty st.
Carlson, Carl O.,	15 Montclair st.,	Accountant, Not Employed.
Carlson, Frank O.,	566 Main st.,	Plumber, 706 Main st.
Carmody, Frank C.,	73 Cherrelyn ave.,	Steam Fitter, 39 Main st.
Carmody, John J.,	374 Armory st.,	Machinist, Bosch Magneto Co., North Main st.
Carmody, John T.,	30 Clinton st.,	Assembler, Page blvd.
Carmody, Thomas J.,	46 West Alvord st.,	Brick Mason, 244 Main st.
Carney, James A.,	284 Dickinson st.,	Laborer, 357 Liberty st.
Carney, Thomas L.,	72 Acushnet ave.,	Electrician, 319 Bridge st.
Carpenter, Herbert W.,	109½ Hancock st.,	Carpenter, 109½ Hancock st

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION
Carpenter, John H.,	111 Bowdoin st.,	Merchant, 350 Main st.
Carrier, Albert E.,	587 Worthington st.,	Miller, 194 Lyman st.
Carrigan, Edward H.,	112 Greenwood st.,	Printer, 32 Cypress st.
Carroll, Harold F.,	420 Main st.,	Hotel Clerk, 420 Main st.
Carroll, John,	41 Virginia st.,	Plumber, 42 Harrison ave.
Cary, Louis A.,	214 High st.,	Insurance Agent, 387 Main st.
Casey, William R.,	1483 State st.,	Draftsman, 33 Lyman st.
Cassidy, Patrick H.,	64 Sheldon st.,	Cigar Manufacturer, 41 Birnie ave
Caswell, Harry T.,	12 Brookline ave.,	Shipping Clerk, Ft. Church st., West Springfield.
Cataw, Arthur Z.,	24 Leonard st.,	Salesman, 435 Dwight st.
Cavanagh, James,	47 Birnie ave.,	Stone Cutter, Pine Point.
Cavin, Maurice J.,	54 Chester st.,	Plumber, 447 Belmont ave.
Cawley, Thomas F.,	384 Armory st.,	Shipping Clerk, 373–375 Main st.
Chaffee, Nelson,	144 Mattoon st.,	Rooming House Keeper, 144 Mattoon st.
Chalker, Frank J.,	16 Broad st.,	Furniture Repair Man, 538 Main st
Chamberlain, Albert A.,	132 Amherst st.,	Accountant, 500 Main st.
Chamberlain, Ned R.,	37 Pomona st.,	Carpenter, 131 Bowdoin st.
Chamberlin, Joseph,	643 Sumner ave.,	Manager, 17 Elm st.
Chapin, Alfred H.,	Crescent Hill,	President, 38 Walter st.
Chapin, Leon D.,	76 Northampton ave.,	Foreman, 837 State st.
Chapin, Winfield E.,	336 Chestnut st.,	Wood Worker, 97 Wason ave.
Chapman, Ernest G.,	18 Castle ave.,	Collector, 73 State st.
Charest, Joseph J. B.,	35 Abbe ave.,	Foreman, Columbia ter.
Charron, Alfred J.,	11 Massasoit place,	Druggist, 236 North Main st.
Charron, Joseph S.,	11 Massasoit place,	Druggist, 236 North Main st.
Chase, Fred D.,	20 Rochelle st.,	Trav. Salesman, Ferguson-Bedell Co., Boston.
Chase, Lyndon H.,	92 School st.,	Lumber Dealer, 68 Birnie ave.
Chase, Melville B.,	18 Biltmore st.,	Salesman, Page blvd.
Chauncey, Byron A.,	299 Oakland st.,	Office Clerk, 21 Cypress st.
Chevalier, Arthur F.,	16 Cumberland st.,	Foreman, 149 Wason ave.
Childs, Robert C.,	15 Bloomfield st.,	Electrician, 201 Dwight st.
Church, Henry R.,	30 Commonwealth ave.,	Clerk, 500 Main st.
Clairmont, Edward T.,	35 Mason place,	Real Estate Dealer, 5 Elm st.
Clapp, Frank A.,	18 Greenacre square,	Piano Tuner, 18 Greenacre square.
Clark, Charles G.,	15 Edgewood st.,	Tool Maker, B. & A. Shops, West Springfield.
Clark, Edward O.,	66 Dartmouth st.,	Gen. Manager, Milton Bradley Co., 74 Park st.
Clark, Edward R.,	244 Washington blvd.,	Manager, 20 Oak st.
Clark, George W.,	109 Pearl st.,	Tool Maker, Not Employed.
Clark, Harold H.,	25 Cherryvale ave.,	Engineer, 132 Liberty st.
Clark, Henry M.,	60 Green lane,	Real Estate Dealer, 100 Broadway.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Clark, Horace N.,	66 Fairfield st.,	Secretary, 225 Liberty st.
Clark, John Charles,	92 Spring st.,	Painter, About the city.
Clark, Michael F.,	27 Waverly st.,	Tinsmith, 301½ North Main st.
Clark, Theodore H.,	39 Hawthorne st.,	Salesman, Cor. Hancock and Walnut sts.
Clark, William H.,	191 Marion st.,	Druggist 279 Main st.,
Clarke, Douglas M.,	283 Allen st.,	Clerk, 213 Worthington st.
Clarke, John,	190 Hancock st.,	Machinist, Front st., I. O.
Clarkson, Fred H.,	16 Monmouth st.,	Manager, 395 Dwight st.
Clemence, Percy G.,	44 Trinity ter.,	Title Examiner, 500 Main st.
Clement, Carl C.,	83 Euclid ave.,	Salesman, 83 Euclid ave.
Clifford, Eugene,	671 Carew st.,	Machinist, 86 Broadway, Chicopee Falls.
Clifford, Richard W.,	107 Hastings st.,	Watchman, 36 Court st.
Cloonan, Stephen A.,	23 Clayton st.,	Proprietor, 114 State st.
Clouse, Walter V.,	128 Marion st.,	Lathe Hand, Page blvd.
Clouthier, Arthur I.,	32 Whiting st.,	Grinder, Page blvd.
Clune, Arthur J.,	732½ Main st.,	Embalmer, 732½ Main st.
Cobb, Edmund J.,	15 Raymond ave.,	Foreman, 48 Harrison ave.
Coburn, Charles E.,	22 Horace st.,	Driver, 333 Bridge st.
Cochrane, Ernest S.,	19 Stebbins st.,	Insurance Agent, 274 Main st.
Coffer, John C.,	161 Walnut st.,	Ice Dealer, 161 Walnut st.
Cohen, Julius A.,	31 Maple st.,	Merchant, 419–421 Main st.
Cohen, Raphael M.,	98 Bowles st.,	Salesman, 188 Worthington st.
Colburn, Richard C.,	100 Federal st.,	Assistant President, 29 Worthington st.
Coleman, George L.,	23 Dartmouth st.,	Carpenter, 151–159 Bridge st.
Collenberg, William G.,	28 Beaumont ter.,	Clerk, 500 Main st.,
Collins, Clarence F.,	36 Oak st.,	Manufacturer, rear 36 Oak st.
Collins, George E. P.,	16 Cumberland st.,	Machinist, 214 Birnie ave.
Collins, J. Frank,	86 Atwater ter.,	Merchant, 170 Lyman st.,
Collins, John J.,	29 Underwood st.,	Electrical Contractor, 92 State st.
Collins, Stephen J.,	34 Church st.,	Provision Dealer, 10 Main st.
Collins, Timothy J.,	45 Underwood st.,	Electrical Contractor, 92 State st.
Collins, William M.,	34 Church st.,	Salesman, 21 Besse place.
Collord, Lester W.,	20 Summit st.,	Tool Maker, Ft. Mechanic st.
Colwell, Harding H.,	84 Oak st., I. O.,	Salesman, 130 Lyman st.
Combs, Raymond L.,	263 Central st.,	Clerk, 123 Florence st.
Congdon, Oscar R.,	87 Bancroft st.,	Clerk, 390 Bridge st.
Conley, Patrick H.,	99½ High st.,	Upholsterer, 349–359 Main st.
Conlin, Bernard J.,	42 Bancroft st.,	Plumber, Ft. Church st., West Springfield.
Connell, George C.,	12 Prescott st.,	Printer, 29 Worthington st.
Connors, John J.,	137 Everett st.,	Clerk, 160 Chestnut st.
Converse, Lester F.,	79 Vermont st.,	Machinist, 41 Mill st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Converse, Standish S.,	21 Blake Hill,	Clerk, 17 Harrison ave.
Cook, Charles W.,	75 Dwight st.,	Machine Hand, 168 Birnie ave.
Cook, Frank C.,	100 Washington road,	Accountant, 451 Main st.
Cooke, Harold S.,	92 School st.,	Secretary, 31–41 Market st.
Cooke, Ralph H.,	97 Massachusetts ave.,	Chief Clerk, 500 Main st.
Cooley, Moses L.,	24 Sumner ter.,	Merchant, 605 Main st.
Cooney, Martin E.,	140 Franklin st.,	Printer, Not Employed.
Cooper, Charles F.,	179 Wilbraham road,	Bookkeeper, 852 State st.
Cooper, Joseph,	234 Allen st.,	Chauffeur, 234 Allen st.
Corbin, Harold M.,	5 Crystal ave.,	Broker, 317 Main st.,
Corbin, Henry L.,	800 Worthington st.,	Automobile Trimmer, 521 Worthington st.
Corey, Kenneth T.,	16 Ventura st.,	Civil Engineer, 500 Main st.
Corliss, Thomas M.,	109 Everett st.,	Clerk, 390 Main st.
Costello, Charles J.,	24 Saratoga st.,	Bill Poster, Not Employed.
Costello, John P.,	96 Calhoun st.,	Clerk, 96 Calhoun st.
Cosgrove, James S.,	6 Sheldon st.,	Steam Fitter, 100 State st.
Costigan, John A.,	29 Arch st.,	Machinist, N.Y.N.H.&.H.R.R.Co.
Costine, William G.,	63 Greene st.,	Salesman, 16–32 Sanford st.
Couch, Frederick H.,	43 Avon place.,	Clerk, 238 Dwight st.
Courtney, James A.,	62 Waverly st.,	Type Operator, 32 Cypress st.
Couture, Alfred,	69½ Eastern ave.,	Blacksmith, Warwick ave.
Cowles, Fred R.,	66 Ventura st.,	Clerk, 88 Birnie ave.
Cowles, Robert B.,	117 Florence st.,	Secretary, 318 Main st.
Coyle, William A.,	14 Seventh st.,	Accountant, B. &. A. Freight Office.
Craft, Howard E.,	540 White st.,	Salesman, Ithaca Sign Works, Ithaca, N. Y.
Crafts, Royal L.,	106 Summer st.,	Foreman, 96 Summer st.
Craig, Frank W.,	41 Bloomfield st.,	Photographer, 67 Pratt st., Hartford, Conn.
Craig, Samuel,	45 Crestwood st.,	Foreman, Ft. Grape st., Chicopee.
Cram, Frank E.,	768 Belmont ave.,	Inspector, Page blvd.
Crane, John P.,	166 Main st., I. O.,	Superintendent, Front st., I. O.
Cratty, John H.,	350 Plainfield st.,	Inspector, 837 State st.
Creswell, Albert,	N. S. Wilbraham road,	Farmer, Wilbraham road.
Crocker, Henry A.,	852 Belmont ave.,	Salesman, 29 Belmont ave.
Crofoot, William S.,	152 Oak st., I. O.,	Master Plumber, 141 Main st., I. O.
Cronin, Everett,	7 Marble st.,	Inspector, Ft. Church st., West Springfield.
Crosier, Robert A.,	71 King st.,	Painter, 71 King st.
Cross, Albert P.,	33 Newland st.,	Maintenance Man, 214 Birnie ave.
Crowley, J. Frank,	95 Central st.,	Stock Clerk, 158 Chestnut st.
Cruickshank, Alan,	36 Bancroft st.,	Chauffeur, 26 Ridgewood ter.
Cruise, Michael F.,	38 Dexter st.,	Salesman, 121 Lyman st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Cudahy, Charles F.,	574 Chestnut st.,	Mechanic, Ft. Church st., West Springfield.
Cudahy, William J.,	574 Chestnut st.,	Express Man, 385 Liberty st.
Cuffee, Frederick W.,	41 Beacon st.,	Janitor, Not Employed.
Cummings, Walker F.,	20 Sumner ave.,	Auditor, 289 Main st.,
Cunliffe, J. William,	18 Middlesex st.,	Real Estate Dealer, 476 Main st.
Cunningham, Alexander W.,	51 Revere st.,	Drug Clerk, 492 Mill st.
Cunningham, Charles J.,	146 Bay st.,	Salesman, Heinz Co., Albany, N. Y.
Cunningham, Edward J.,	W. S. Armory st.,	Caretaker, Van Horn Park.
Cunningham, Lester P.,	123 Amherst st.,	Accountant, 293 Bridge st.
Cunningham, Merton A.,	16 Dunmoreland st.,	Contractor, 16 Dunmoreland st.
Curran, John,	33 Collins st.,	Paver, 36 Court st.
Curry, William G.,	27 Bevier st.,	Foreman, Opp Center Depot, Chicopee.
Curtis, Elmer N.,	878 Worthington st.,	Receiving Clerk, Superior place.
Curtis, Henry H.,	4 Lafayette st.,	Manufacturer, 92 Hayden st.
Cusack, Edward T.,	132 Marion st.,	Repair man, 151-157 Bridge st.
Cushing, Charles,	15 Colonial ave.,	Manufacturer, 293 Bridge st.
Cushman, Floyd E.,	79 Grenada ter.,	Stock Clerk, 37 Harrison ave.
Cutter, Harold H.,	14 Hiawatha st.,	Foreman, 21 Cypress st.
Cuzzone, Nicola,	96 Melrose st.,	Carpenter, Not Employed.
Daley, Martin S.,	7 Mattoon st.,	Receiving Clerk, Spfd. Glazed Paper Co., West Springfield.
Dalton, William A.,	137 Commonwealth ave.,	Salesman, 72 Dwight st.
Daly, Howard A.,	26 Mattoon st.,	Clerk, Trolly Express Co., 31 Bond st.
Damon, Lloyd W.,	32 Bancroft st.,	Draftsman, 33 Lyman st.
Damon, Walter H.,	32 Bancroft st.,	Superintendent, 73 State st.
Daniel, Harry,	26 Massachusetts ave.,	Merchant, Northampton, Mass.
Daniels, Lew J.,	270 Liberty st.,	Manager, 270 Liberty st.
Darrah, John A.,	116 Westminster st.,	Trav. Salesman, John Wyeth & Bros., Philadelphia, Pa.
Dart, Walter H.,	40 Wellesley st.,	Clerk, 500 Main st.
Davenport, Edwin A.,	95 Lyndale st.,	Clerk, 31 Elm st.
Davis, Carl G.,	50 Riverview ter.,	President, American Saw Mfg. Co., Boylston st.
Davis, Charles E.,	49 Albemarle st.,	Foreman, 283-295 Worthington st.
Davis, Charles F.,	67 Armory st.,	Grocer, 67 Armory st.
Davis, Edwards O.,	244 Oak st., I. O.,	Assistant Manager, 203 Hampshire st., I. O.
Davis, Fred W.,	104 Spring st.,	Compositor, Ludlow Mfg Co., Ludlow.
Davis, Theodore H.,	33 Donald st.,	Musician, 192-194 Worthington st.
Davis, Thomas H.,	647½ Main st.,	Carpenter, Not Employed.
Dawson, Joseph M.,	786 State st.,	Photo Maker, 786 State st.
Day, Edward H.,	140 Chestnut st.,	Manager, 48 Harrison ave.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Day, Frederic W.,	45 Middlesex st.,	Clerk, 317 Main st.
Dayton, Chester J.,	71 Oak Grove ave.,	Shipping Clerk, 32 Lyman st.
Dean, A. Lincoln,	46 Alderman st.,	Mason, 464 Maple st., Holyoke.
Dearborn, Frederick B.,	122 Firglade ave.,	Clerk, Union Station.
Dearborn, Harold W.,	34 Rochelle st.,	Druggist, 1081 State st.
Deasy, Neil William,	148 Eastern ave.,	Chauffeur, Not Employed.
Debour, Fred D.,	24 Roseland st.,	Clerk, 130 Birnie ave.
Delehanty, James W.,	76 Grand st.,	Merchant, 492 Mill st.
DeMartin, James W.,	rear 259 Central st.,	Electrician, 283–295 Worthington st.
Demars, Fred,	21 Auburn st.,	Laborer, 21 Cypress st.
Deming, Fred W.,	196 Forest Park ave.,	Manager, Cor. Humphrey and McKinley aves., Chicopee.
Dennis, George,	278 Centre st., I. O.,	Ice Dealer, 278 Centre st., I. O.
Depew, Chauncey M.,	42 Kimberly ave.,	Brush Manufacturer, 275 Main st.
Derby, Winfred P.,	97 Clarendon st.,	Clerk, Front st., Chicopee Falls.
Derusha, Charles,	23 Winthrop st.,	Shipping Clerk, Potter Knitting Co., Locust st.
Deschamps, Louis H.,	103 Garfield st.,	Clerk, 371 Main st.
Desrosiers, Alphonse C.,	52 Rutledge ave.,	Carpenter, 392 Main st.
Desrosiers, Clifford,	28 Morris st.,	Machinist, Not Employed.
Dewey, Frank E.,	54 Dawes st.,	Manufacturer, 304 Plainfield st.
Dexter, Albert J.,	15 Montclair st.,	Draftsman, Front st., Chicopee Falls.
Dexter, Ernest J.,	68 Forest Park ave.,	Agent, 476 Main st.
Dexter, Eugene A.,	194 Sumner ave.,	Merchant, 123 Carew st.
Dibble, Charles W.,	28 Itendale st.,	Machinist, ft. Howes st.
Dibble, Louis N.,	65 Riverview ter.,	Manufacturer, 216 Worthington st.
Dibble, Winfred H.,	167 Walnut st.,	Foreman, B. & A. Engine House.
Dickinson, Arthur C.,	160 Oak st., I. O.,	Tool Maker, Worcester st., I. O.
Dickinson, Jesse E.,	33 Smith st.,	Assistant Purchasing Agent, 15 Mill st.
Dickinson, Oliver H.,	110 Atwater ter.,	Retired.
Diefendorf, John A.,	64 Saratoga st.,	Buyer, 345 Main st.
Diehl, John J.,	134 Bay st.,	Salesman, Heinz Co., Albany, N. Y.
Dillon, Patrick J.,	29 Massasoit st.,	Boiler Maker, B. & A. R. R. Shops, West Springfield.
Dimock, Stanley K.,	72 King st.,	Electrician, Page blvd.
Dineen, Martin J.,	19 Donald st.,	Bricklayer, about the city.
Dineen, Patrick,	116 Tenth st.,	Brick Mason, 395 Dwight st.
Dinsmoor, Howard E.,	23 Foster st.,	Salesman, 78 Hillman st.
Dinsmore, Martin L.,	85 Westford ave.,	Insurance Agent, 387 Main st.
Dinsmore, Philip N.,	120 Belmont ave.,	Division Superintendent, 283–295 Worthington st.
Dobbs, Scott E.,	104 Chestnut st.,	Foreman, 837 State st.
Dodge, Augustus W.,	53 Buckingham st.,	Banker, American Express Co., 65 Broadway, New York.
Dodge, Clinton W.,	53 Kenwood Park,	Optician, 331 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Donahue, John,	574 Armory st.,	Brazier, 837 State st.
Donnelly, Edward H.,	30 Clinton st.,	Not Employed.
Donoghue, James A.,	42 Morgan st.,	Caretaker, Emily Bill Playground.
Donoghue, Michael,	63 Clayton st.,	Machinist, 16 Union st., West Springfield.
Donohue, Daniel P.,	601 Plainfield st.,	Foreman, 11–17 Railroad row.
Donovan, David F.,	10 Arbor st.,	Plumber, 822 South Main st.
Donovan, James J.,	36 Greene st.,	Painter, Not Employed.
Donovan, Michael J.,	383 Armory st.,	Freight Handler, B. &. A. Freight House.
Donovan, Richard,	44 Chapel st.,	Grocer, 46 Chapel st.
Donovan, Timothy,	81 Tenth st.,	Public Weigher, 224 Summer st.
Dooley, Timothy J.,	56 Foster st.,	Druggist, Not Employed.
Doolittle, Charles L.,	46 Kimberly ave.,	Salesman, 349–359 Main st.
Dorman, Arthur L.,	67 Ashley st.,	Chauffeur, for the city.
Doubleday, Edwin S.,	342 Forest Park ave.,	Accountant, 293 Bridge st.
Doubleday, Herbert H.,	61 Montrose st.,	Tool Maker, Rauch & Lang, Willimansett.
Dougherty, John,	957 Liberty st.,	Foreman, 220 Franklin st.,
Doughty, Edward F.,	16 Acushnet ave.,	Manager, 180 Spring st.
Douglas, Edward C.,	56 High st.,	Superintendent, 500 Main st.,
Douglass, Fay C.,	13 Norfolk st.,	Superintendent, 331 Liberty st.
Dowd, John P.,	206 Main st., I. O.,	Retired.
Dowd, William P.,	103 Eastern ave.,	Glazier, 850 State st.
Downer, Harrison R.,	28 Parallel st.,	Switchman, B. & M. R. R. Co.
Downey, Charles G.,	36 Winthrop st.,	Shipping Clerk, 21 Railroad row.
Downey, Daniel J.,	67 Bond st.,	Painter, ft. Cypress st.
Downey, Frank J.,	11 Walden st.,	Clerk, 36 Court st.
Downey, James J.,	92 Massasoit st.,	Shoe Merchant, 220 Main st.
Doyle, John Raymond,	117 Patton st.,	Salesman, 148 Lyman st.
Dragon, Joseph N.,	169 Massachusetts ave.,	Manager, 289 Main st.
Drake, Ralph A.,	237 White st.,	Electrician, Light and Power Co., Turners Falls.
Drake, Thomas,	16 Sumner ave.,	Master Plumber, 13 Market st.
Dreyer, Hermann F.,	44 Abbe ave.,	Machinist, Bosch Magneto Co., North Main st.
Drinan, John L.,	154 Belmont ave.,	Plumber, 240 Main st.
Driscoll, Francis J.,	28 Everett st.,	Real Estate Agent, 476 Main st.
Driscoll, Patrick J.,	205 College st.,	Carpenter, Unemployed.
Driscoll, William Patrick,	38 Chapel st.,	Mason, 87 Biltmore st.
Drumheller, William P.,	46 Orlando st.,	Superintendent, 33 Morris st.
Dubois, Edward W.,	7 Longview st.,	Printer, 32 Cypress st.
Dubois, Herbert E.,	54 Carew st.,	Foreman, 7 North Main st.
Dubois, Wilbrod J.,	156 Oak st., I. O.,	Druggist, 164 Main st., I. O.
Duffy, James Joseph,	1240 North st.,	Steamfitter, 123 Carew st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Duggan, Charles F.,	38 Northampton ave.,	Traffic Manager, 31 Elm st.
Dumas, Joseph A.,	380 Main st., I. O.,	Draftsman, 203 Hampshire st., I. O.
Dunlap, Myron W.,	411 Bay st.,	Chauffeur, 96 Summer st.
Dunn, Charles N.,	63 Federal st.,	President, 385 Liberty st.
Dunn, James J.,	525 Main st.,	Laborer, 256 Main st.
Dunn, John J.,	288 Chestnut st.,	Auto Top Maker, 690 Worthington st.
Dunn, Peter J.,	24 Congress st.,	Clerk, Not Employed.
Dutcher, Frank E.,	934 Belmont ave.,	Linotype Operator, 143 Pratt st., Meriden, Conn.
Duval, Joseph M.,	317 Eastern ave.,	Iceman, 195 Alden st.
Dwyer, Thomas J.,	564 Chestnut st.,	Employment Agent, Front st., Chicopee Falls.
Dwyer, William H.,	452 Dickinson st.,	Foreman, Bosch Magneto Co., North Main st.
Dyer, Thomas,	W. S. Parker st.,	Farmer, Parker st.
Eagan, Thomas, Jr.,	39 Locust st.,	Envelope Cutter, 31 Cypress st
Earl, Lewis M.,	29 Marlboro ave.,	Engraver, 411 Main st.
Eastman, Charles M.,	78 Bloomfield st.,	Clerk, 2 Johnson st.
Eaton, Albert P.,	107 Albemarle st.,	Salesman, 147 Dwight st.
Eaton, Frank S.,	1446 Page blvd.,	Manager, 147 Dwight st.
Eaton, Roland G.,	60 Dexter st.,	Salesman, 310 Main st.
Eberhardt, Oscar A.,	47 Demond ave.,	Secretary, R. R. Y. M. C. A.
Edmonds, Harry E.,	22 Winthrop st.,	Proprietor, 61 Bliss st.
Edwards, Frank W.,	760 Worthington st.,	Mechanical Engineer, Steere Organ Co., Westfield.
Edwards, Stanley A.,	3 High st. place,	Printer, 500 Main st.
Egan, James,	160 Maynard st.,	Mason, Lewis Construction Co., New York, N. Y.
Egan, John M.,	25 Cumberland st.,	Foreman, 214 Birnie ave.
Egan, Thomas Peter,	104 Colton st.,	Painter, 121 State st.
Elmer, Nelson L.,	642 State st.,	Real Estate Dealer, 476 Main st.
Elser, Albert Conrad,	361 Bay st.,	Baker, 361 Bay st.
Ely, John D.,	218 Parker st.,	Farmer, 218 Parker st.
Emerson, Alfred E.,	15 Rutledge ave.,	Manager, 49 Taylor st.
Emerson, Clarence E.,	99 Jefferson ave.,	Shipping Clerk, Spfd. Provision Co., Plainfield st.
Emery, George G.,	57 Allen st.,	Farmer, Stony Hill road.
Empsall, Alfred D.,	12 Spencer st.,	Foreman, 41 Mill st.
Engel, Karl J.,	14 Middlesex st.,	Manufacturer, 92 Hayden st.
English, Edward F.,	83 Charles st.,	Laborer, B. & A. Freight Office.
Evans, George J.,	33 Phoenix st.,	Calker, 36 Court st.
Evans, Harry R.,	65 Clayton st.,	Machinist, 132 Cass st.
Everton, Willard H.,	47 Bradford st.,	Butcher, 30 Main st.
Faggs, Herbert J.,	100 Greene st.,	Cook, 12 Sanford st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Fairbanks, Francis B.,	65 Mapledell st.,	Accountant, Unemployed.
Fairchild, Arthur D.,	133 Florida st.,	Insurance Clerk, 195 State st.
Falt, Alonzo P.,	33 Berkeley st.,	Draftsman, 33 Lyman st.
Falvo, Agostino,	19 Granville st.,	Assembler, 837 State st.
Farland, Fred,	37 Grenada ter.,	Proprietor, 547½ Main st.
Farrell, Richard J.,	534 Armory st.,	Electrician, 73 State st.
Farrell, Thomas R.,	163 Bridge st.,	Funeral Director, 163 Bridge st.
Faust, Joseph H.,	23 Cedar st., I. O.,	Barber, 157 Main st., I. O.
Fay, Stillman M.,	104 Spring st.,	Salesman, 96 Main st.
Fenton, Joseph R.,	414 North Main st.,	Foreman, 354 Birnie ave.
Fenton, Patrick Peter,	407 Armory st.,	Plumber, 131 Main st.
Ferguson, James E.,	41 Sylvan st.,	Dyer, 14 Harrison ave.
Ferre, Harold P.,	93 Marengo Park,	Assistant Treasurer, 367 Worthington st.
Ferrier, Simon Fraser,	111½ High st.,	Welder, 32–34 Liberty st.
Ferry, Harry L.,	36 Hawley st.,	Plumber, 81 Market st.
Feustel, George I.,	15 Itendale st.,	Inspector, Bosch Magneto Co., North Main st.
Field, Edwin A.,	45 Rochelle st.,	Editor, 32 Cypress st.
Field, Henry A.,	57 Westminster st.,	Insurance Agent, 289 Main st.
Finton, Thomas J.,	123 Essex st.,	Machinist, 39–49 Sharon st.
Fisher, Charles R.,	26 Summit st.,	Clerk, 350 Main st.
Fisher, George G.,	643½ Main st.,	Conductor, 7 North Main st.
Fiske, James W.,	21 Dunmoreland st.,	Auditor, 331 Liberty st.
Fitch, Norman M.,	81 Manitoba st.,	Cutter, 906 South Main st.
Fitts, Charles B.,	53 Albemarle st.,	Treasurer, 89 Logan st.
Fitzgerald, Garrett,	13 Underwood st.,	Butcher, 16–32 Sanford st.
Fitzgerald, James M.,	50 Winthrop st.,	Bookbinder, 56 Harrison ave.
Fitzgerald, Joseph,	36 Aster st.,	Plumber, 817 State st.
Fitzgerald, Michael,	32 Lexington st.,	Boiler Maker, B. & A. Shops, West Springfield.
Fitzgerald, Patrick Joseph,	24 Donald st.,	Foreman, 274 Main st.
Fitzgerald, Thomas A.,	132 Alderman st.,	Conductor, 7 North Main st.
Fitzgerald, Thomas J.,	16 Clayton st.,	Millwright, Bosch Magneto Co., North Main st.
Fitzpatrick, Farrell J.,	54 Locust st.,	Salesman, 26 Fort st.
Fitzpatrick, George B.,	62 Quebec st., I. O.,	Tire Maker, 74 Park st.
Fitzpatrick, John E.,	15 Richelieu court,	Foreman, 662 North Main st.
Flagg, George F.,	656 State st.,	Real Estate Broker, 656 State st.
Flagg, Levi W.,	944 Worthington st.,	Painter, 305 Dwight st.
Flannery, James Francis,	728 Union st.,	Blacksmith, 30 Cypress court.
Flathers, George H.,	70 Saratoga st.,	Superintendent, 1 Belmont ave.
Flebotte, Joseph Thomas,	305 Main st., I. O.,	Grocer, 135 Oak st., I. O.
Fleming, Clifford DeVere,	21 Lester st.,	Clerk, 194 Pine st.
Fletcher, Frederick J.,	46 Center st.,	Machinist, Unemployed.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Flint, Charles J.,	35 Commonwealth ave.,	Clerk, 156 Wason ave.
Flynn, Cornelius,	195 Hampshire st.,	I. O., Foreman, B. & A. R. R. Co.
Flynn, Jeremiah,	28 Webster st.,	Foreman, Gas Co., Water st.
Foerster, Louis,	279 Walnut st.,	Furrier, 137½ State st.
Foley, Michael T.,	43 Brookline ave.,	Paper Manufacturer, 4 Birnie ave.
Forer, John H.,	77 Orange st.,	Merchant, 37 Dwight st.
Fortin, George J.,	16 Rutledge ave.,	Assembler, Foot Church st., West Springfield.
Fortune, Albert,	4 Richelieu place,	Electrician, 256 Main st.
Foskett, Harrison W.,	21 Maple st.,	Parcel Delivery, 399 Main st.
Foss, J. Ervin,	22 Wilmont st.,	Auto Body Maker, 531 Worthington st.
Fossett, Frank W.,	33 Salem st.,	Auto Repairman, 89 Elliott st.
Foster, Harry M.,	103 Garfield st.,	Claim Agent, 33 Lyman st.
Foster, Irving W.,	86 Osborne ter.,	Salesman, Not Employed.
Foster, Seth S.,	276 Central st.,	Shipping Clerk, 276 Central st.
Fountain, Abraham,	44 Castle ave.,	Filer, 39 Stockbridge st.
Fountain, Oliver E.,	14 Howard st.,	Wire Worker, 417 Liberty st.
Fox, George A.,	95 High st.,	Department Manager, Park st.
Foy, James W.,	10 Armory st. court,	Bookkeeper, 110 Taylor st.
Francis, Willard S.,	40 High st.,	Inspector of Buildings, 33 Lyman st.
Frawley, Thomas J.,	148 Abbe ave.,	Manager, 244 Main st.
Freshour, Louis E.,	70 Alderman st.,	Salesman, C. W. Nash, Boston.
Frey, William J.,	415 Sumner ave.,	Construction Work, Front st., Chicopee Falls.
Frost, Lewis H.,	83 Elliott st.,	Engraver, Milton Bradley Co., 74 Park st.
Frost, Myron S.,	260 Hancock st.,	Grocer, 260 Hancock st.
Fuller, Frederic W.,	120 Mill st.,	Insurance Agent, 311 Main st.
Fulton, John B.,	27 Hooker st.,	Foreman, 88 Birnie ave.
Fulton, Robert R.,	37 Warriner ave.,	Paymaster, Warwick ave.
Furrows, Samuel E.,	118 Westford ave.,	Credit Man, 21 Railroad st.
Gagnier, Samuel J.,	32 Eagle st.,	Contractor, 32 Eagle st.
Galbraith, Robert,	78 Homestead ave.,	Mason, International Nitrogen Co., Readsboro, Vt.
Gale, George T.,	45 Sylvan st.,	Conductor, 7 North Main st.
Gallagher, Edward J.,	38 Brookline ave.,	Motorman, 7 North Main st.
Gallagher, Edward J., Jr.,	38 Brookline ave.,	Machinist, 837 State st.
Gallup, Burton C.,	25 Burr st.,	Machinist, Foot Church st., West Springfield.
Galvin, John F.,	31 Malden st.,	Brick Mason, Unemployed.
Galvin, Thomas E.,	24 Governor st.,	Truckman, 24 Governor st.
Garber, Samuel,	19 Bartlett st.,	Chauffeur, 19 Bartlett st.
Garvey, James,	59 Kenwood Park,	Salesman 54 Fort st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Garvey, Samuel E.,	37 Greenwood st.,	Expressman, Union Station.
Gates, Charles A.,	12 Grove st.,	Motorman, 7 North Main st.
Gates, Harrison C.,	199 Northampton ave.,	Foreman, 363 Eastern ave.
Gates, Joseph H.,	22 Donald st.,	Cable Splicer, 295 Worthington st.
Gaudette, Albert,	788 Liberty st.,	Carpenter, Not Employed.
Gaudette, Alfred P.,	389 Armory st.,	Assembler, 39 Stockbridge st.
Gauthier, Leon F.,	104 Stockman st.,	Electrician, 140 Chestnut st.
Gaylord, Ralph W.,	95 Montrose st.,	Clerk, 39 Stockbridge st.
Gaynor, Thomas,	164 Worcester st., I. O.,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Gendreau, Wilfred L.,	56 Johnson st., I. O.,	Grocer, 54 Johnson st., I. O.
Gendreau, Wilfred U.,	10 Rutledge ave.,	Salesman, 10 Rutledge ave.
Geoffrion, Orille D.,	173 William st.,	Painter, 93 Broad st.
Gerard, William J.,	210 High st.,	Cook, Not Employed.
Giard, Arthur J.,	37 Winthrop st.,	Salesman, 538 Main st.
Gibbons, David B.,	69 Tenth st.,	Machinist, 156 Wason ave.
Gibbs, J. Edwin,	127 Bristol st.,	Clerk, 837 State st.
Gifford, Eliot W.,	32 Byers st.,	Salesman, Pierce Arrow Co., Park st.
Gilbert, Adolph W.,	140 Oak st., I. O.,	President, Chapman Valve Co., 203 Hampshire st., I. O.
Gilbert, Arthur L.,	40 Homer st.,	Florist, 40 Homer st.
Gilbert, Samuel A.,	102 Whittier st.,	Paper Cutter, foot Howes st.
Gilfoil, George T.,	693 Main st.,	Retired.
Gilhooley, Francis J.,	80 Eastern ave.,	Mechanic, 67 Taylor st.
Gilhooly, Frank H.,	26 Bancroft st.,	Store Clerk, 190 Main st.
Gilmore, Dwight,	175 Maple st.,	Theatre Manager, 11 Elm st.
Gilmore, William J.,	23 Oak st.,	Department Manager, 211 Worthington st.
Gilwee, Francis T.,	72 Tenth st.,	Blacksmith's Helper, 163 Lyman st.
Gleason, George A.,	739 Sumner ave.,	Wire Weaver, 417 Liberty st.
Glennon, Bernard F.,	12 Warren ave.,	Merchant, 12 Warren ave.
Goggin, Frank P.,	21 Seventh st.,	Ruler, 214 Birnie ave.
Goldstein, Nathan E.,	390 Sumner ave.,	Manager, 103 Bridge st.
Goodchild, William C.,	104 Massachusetts ave.,	Auto Salesman, 29 Worthington st.
Goodwin, Rowland C.,	38 Thorndyke st.,	Manager, 893 Sumner ave.
Goodyear, Howard W.,	131 Spring st.,	Insurance Underwriter, 195 State st.
Gordon, William B.,	25 Greene st. ave.,	Foreman, Warwick ave.
Gore, Charles G.,	155 Tyler st.,	Printer, 29 Sheffield st.
Goss, Edwin W.,	7 Piney place,	Receiving Clerk, 39 Stockbridge st.
Gour, Alcide J.,	23 Langdon st.,	Carpenter, 20 Woodmont st.
Gour, Leon J.,	49 Genesee st.,	Architect, 20 Osborne ter.
Gowrie, Clarence J.,	55 Earl st.,	Superintendent, 151-157 Bridge st.
Graham, James,	88 Acushnet ave.,	Repairman, Bosch Magneto Co., North Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Graves, George Harold,	202 High st.,	Bookkeeper, 417 Liberty st.
Graves, Howard S.,	33 Warner st.,	Broker, 293 Main st.,
Graves, Ralph S.,	116 Florida st.,	Manager, 116 Florida st.
Gray, Arthur H.,	24 Revere st.,	Shipping Clerk, 500 Main st.
Gray, Peter J.,	222 High st.,	Auto Repairer, Not Employed.
Gray, George Stewart,	105 Cambridge st.,	Filer, Unemployed.
Greene, Edward J.,	40 Dunmoreland st.,	Paymaster, 837 State st.
Greene, Howard M.,	114 Dickinson st.,	Clerk, 195 State st.
Gregg, William T., Jr.,	203 College st.,	Trav. Salesman, American Appraising Co., Milwaukee, Wis.
Gregory, George P.,	403 Orange st.,	Cigar Maker, 459 Worthington st.
Gridley, Lewis A.,	237 Bay st.,	Salesman, Smith Farmer Coke Co., 323 East 34th st., New York, N. Y.
Griffin, Francis S.,	179 Dickinson st.,	Musician, Not Employed.
Griffin, Jeremiah,	254 Franklin st.,	Steam Fitter, Gas House, Water st.
Griffin, John J.,	11 Massasoit place,	Conductor, 7 North Main st.
Grimes, George C.,	48 Thompson st.,	Jeweler, 389 Main st.
Grover, Alfred J.,	40 Temple st.,	Clerk, B. & A. R. R. Co.
Gruber, Henry E.,	19 Page blvd.,	Butter and Eggs Dealer, 19 Page blvd.
Gruttermeyer, William F.,	170 Massasoit st.,	Manager, 539 Berkshire ave.
Gumble, Wolcott W.,	98 Cornell st.,	Real Estate Dealer, 374 Main st.
Gunn, Walter J.,	618 Sumner ave.,	Linotype Operator, 56 Harrison ave.
Gustafson, Carl Farnum,	183 Alden st.,	Ice Peddler, 195 Alden st.
Guyer, Edmund F.,	90 Beaumont st.,	Hard Fitter, 39 Stockbridge st.
Gwinnell, Henry,	223 Hancock st.,	Machinist, Not Employed.
Hackett, Archie A.,	109½ Hancock st.,	Carpenter, Not Employed.
Hagerty, Daniel A.,	27 Sheldon st.,	Stage Mechanic, 103 Bridge st.
Haggerty, Patrick Joseph,	51 Langdon st.,	Polisher, Winchester Skate Shop, Broad st.
Haggerty, William J.,	12 Brookline ave.,	Insurance Agent, 274 Main st.
Haight, Andrew V.,	49 Mapledell st.,	Machinist, Fiberloid Co., Worcester st., I. O.
Hale, Albert E.,	64 Seventh st.,	President and Treasurer, 13 Stearns sq.
Hall, Alexander,	914 Boston road,	Stock Clerk, 140 Wilbraham ave.
Hallenstein, Louis J.,	100 Beaumont st.,	Timekeeper, 495 Main st.
Halleran, Thomas M.,	37 Alfred st.,	Inspector, Foot Church st., West Springfield.
Halliday, Thomas W.,	6 Portland st.,	Calender Operator, Holyoke Card and Paper Co., Fisk ave.
Halloran, Joseph A.,	590 Main st.,	Chauffeur, 82 Warwick ave.
Halstead, Frank J.,	1563 North st.,	Salesman, 392 Main st.
Halstead, Harry C.,	1563 North st.,	Bookkeeper, 778 Chestnut st.
Hamilton, Alexander,	30 Allen st.,	Motorman, 7 North Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Hamilton, Cullen E.,	932 State st.,	Cutter, 88 Birnie ave.
Hanafin, Thomas E.,	4 Pasadena st.,	Baker, 546 Main st.
Hanley, James J.,	57 Freeman ter.,	Mailing Clerk, 29 Worthington st.
Hanley, Samuel James,	33 Alfred st.,	Metal Polisher, 837 State st.
Hanlon, Edson E.,	20 Orlando st.,	Real Estate Agent, 310 Main st.
Hannon, John,	36 Bradford st.,	Real Estate Dealer, 36 Bradford st.
Hannon, John J.,	32 Greene st.,	Printer, 48 Harrison ave.
Hannum, Ralph J.,	121 West Alvord st.,	Designer, 495 Main st.
Hanson, Fred O.,	169 Florida st.,	Paper Merchant, 32 Main st., Holyoke.
Hanson, Walter S. S.,	387 Oakland st.,	Printer, 32 Cypress st.
Hardie, Charles H.,	9 Harvard st.,	Clerk, 349 Main st.
Harper, Theodore H.,	97 Phoenix ter.,	Assembler, Stevens & Co., Willimansett.
Harrington, James J.,	90 Amherst st.,	Druggist, 360 Bay st.
Harrington, Patrick,	92 Central st.,	Plumber, 156 Union st.
Harrington, William F.,	55 Massasoit st.,	Not Employed.
Harrington, William J.,	604 Armory st.,	Clothier, 233 Main st.
Harrington, William J.,	35 Ledyard st.,	Butter Maker, 134 Cass st.
Harris, Homer G.,	268 Pearl st.,	Draftsman, 283–295 Worthington st.
Hart, Edward E.,	122 Chestnut st.,	Engineer, H. P. Converse, The New Bridge.
Hart, S. Robert,	89 Fairfield st.,	Traffic Manager, 21 Cypress st.
Hart, William J.,	107 Wilmont st.,	Assistant Chief Clerk, B.&.A.R.R.Co.
Harvey, William E.,	30 Carlisle st.,	Store Keeper, 814 State st.
Harwood, Henry,	144 Oakland st.,	Meat Cutter, 144 Main st.
Haskell, Forest R.,	36 Cumberland st.,	Machinist, 4 Birnie ave.
Haskins, Harold C.,	62 Alderman st.,	Conductor, B. & M. R. R. Co.
Hassion, Frank X.,	10 Chapel st.,	Meat Cutter, 140–142 Lyman st.
Hatch, George,	rear 241 Maple st.,	Chauffeur, 241 Maple st.
Hatfield, William A.,	23 Sumner ter.,	Proprietor, 19 North Main st.
Hathaway, Edward A.,	20 Hunt ter.,	Foreman, 35–39 State st.
Hawes, Harry L.,	68 Washington road,	Farmer, 68 Washington road.
Hawkes, John Joseph,	344 (D) Chestnut st.,	Machinist, Front st., Chicopee Falls.
Hawkins, John E.,	240 Quincy st.,	Driver, 198 King st.
Hawley, Myron L.,	23 Osgood st.,	Provision Dealer, 23 Osgood st.
Haworth, George F.,	56 High st.,	Insurance Broker, 31 Elm st.
Hawthorn, Fred R.,	647½ Main st.,	Piano Tuner, 647½ Main st.
Hayes, George L.,	64 Alderman st.,	Carpenter, 12 Cass st.
Hayes, Timothy P.,	226 High st.,	Night Porter, 390–396 Main st.
Hayes, William,	72 Bloomfield st.,	Electrotyper, Cor. Bridge and Dwight sts.
Hayhurst, James C.,	17 Carlisle st.,	Artist, Warwick ave.
Hayman, Maurice,	264 Franklin st.,	Insurance Agent, 374 Main st.
Hazelwood, Frank A., Jr.,	14 Howard st.,	Cigar Maker, 451 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Heald, Herbert,	610 North Main st.,	Clerk, Holyoke Card and Paper Co., Fisk ave.
Healy, William F.,	37 Massasoit st.,	Machinist, 837 State st.
Healy, Martin H.,	63 North Main st.,	Real Estate Dealer, 168 Bridge st.
Hebbel, Charles A.,	33 Cortland st.,	Machinist, 93 Broad st.
Hebert, William A.,	141 Pineywoods ave.,	Secretary, 195 State st.
Heidel, Charles M.,	80 Massachusetts ave.,	Cashier, 195 State st.
Heinser, Carl,	33 Dunmoreland st.,	Tool Maker, Foot Church st., West Springfield.
Hemsworth, Edward D.,	945 Liberty st.,	Wire Weaver, Warwick ave.
Hendrick, George B.,	Sachem st.,	Manager, Front st., Chicopee Falls.
Hendrickson, Ira E.,	900 Worthington st.,	Salesman, 132 Liberty st.
Hennessey, Martin J.,	65 Prospect st.,	Business Agent, 383–387 Main st.
Henry, Norman W.,	85 Webber st.,	Repairman, 369 Central st.
Herlihy, Frank,	328 Bay st.,	Motorman, 7 North Main st.
Hertzmark, David E.,	64 Grosvenor st.,	Printer, 337 Worthington st.
Hibbard, Nelson J.,	24 Continental st.,	Traveling Salesman, 164 Birnie ave.
Hickey, Jeremiah E.,	246 King st.,	Salesman, 287 Main st.
Hickey, Raymond P.,	935 Liberty st.,	Bookkeeper, Napier st.
Higgins, Edward J.,	11 Mattoon st.,	Salesman, 438 Court Square bldg.
Higgins, John E.,	172 Carew st.,	Night Watchman, Hooker Street Car Barn.
Higgins, Wallace E.,	35 Larkspur st.,	Filer, 39 Stockbridge st.
Hill, Wilbur M.,	226 Pearl st.,	Salesman, 50 Broad st., Boston.
Hill, Willard N.,	59 Clayton st.,	Superintendent, 156 Wason ave.
Hilton, Seymour E.,	138 Wilbraham road,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Hinckley, Charles W.,	104 Plainfield st.,	Expressman, 54 Cypress st.
Hodges, Walter F.,	61 Worcester st., I. O.,	Superintendent, Front st., I. O.
Hogan, Daniel J.,	542 Chestnut st.,	Plumber, 111 Ferry st.
Hogan, George W.,	255 Walnut st.,	Tire Tester, Front st., Chicopee Falls.
Hogan, Harry P.,	72 Court st.,	Carpenter, Silver st., Mittineague.
Hogan, James J.,	670 Carew st.,	Laborer, for the city.
Hogan, Thomas F.,	38 Chapel st.,	Barber, 778 State st.
Hogan, Walter T.,	123 Greene st.,	Machinist, Foot Church st., West Springfield.
Holcomb, Cecil T.,	26 Warner st.,	Clerk, 271 Main st.
Holcomb, Hiram F.,	51 Leyfred ter.,	Auctioneer, 387 Main st.
Holden, Edward H.,	52 Westminster st.,	Veterinary Surgeon, 25 Sanford st.
Holden, Miles C.,	140 Chestnut st.,	President, 53 Hillman st.
Holland, Arthur J.,	885 Worthington st.,	Clerk, 452–461 State st.
Holland, William J.,	19 Warriner ave.,	Bookkeeper, 409 Park st., West Springfield.
Hollings, Harry H.,	77 Manchester ter.,	Piano Polisher, 77 Manchester ter.
Hollister, Albert D.,	28 Amherst st.,	Foreman, Albany st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Holmes, Frederick M.,	33 Arch st.,	Superintendent, Try-Me Mfg. Co., Westfield.
Holmes, Herbert I.,	40 High st.,	Inspector, 837 State st.
Holton, Jesse T.,	72 Pearl st.,	Proprietor, 124 Spring st.
Hood, John D.,	745 Worthington st.,	Clerk, B. & M. R. R. Co., Fulton st.
Hooker, Louis W.,	318 North Main st.,	Superintendent, Spfd. Provision Co., Plainfield st.
Hope, Charles S.,	11 Boston ave.,	Machinist, Standard Steel and Bearings Co., Plainville, Conn.
Horne, James J.,	32 Austin st.,	Printer, 28 Fort st.
Hough, Alfred L.,	384 Armory st.,	Barrel Dealer, 384 Armory st.
Houghton, Arthur L.,	N. S. Allen st.,	Poultry Dealer, N. S. Allen st.
Houlihan, Thomas,	94 Essex st.,	Brass Molder, 354 Birnie ave.
Houlihan, William F.,	51 Auburn st.,	Assistant Assessor, 36 Court st.
Hovey, Fred W.,	52 High st.,	Real Estate Broker, 356 Main st.
Howard, Clarence E.,	72 Burr st.,	Meat Cutter, 325 Belmont ave.
Howard, James H.,	181 Massasoit st.,	Carpenter, 7 North Main st.
Howard, Orion W.,	588 Dickinson st.,	Salesman, Foot Church st., West Springfield.
Howard, Walter,	983 Carew st.,	Lumber Buyer, 168 Bridge st.
Howe, Walter R.,	51 Westminster st.,	Salesman, 482 Main st.
Hubbard, Frank H.,	34 Salem st.,	Purchasing agent, 29 Worthington st.
Hubbard, Fred A.,	80 Florida st.,	Manager, 289 Main st.,
Hubbard, George A.,	48 Keith st.,	Real Estate Dealer, 48 Keith st.
Hubbard, John P.,	15 James st.,	Clerk, 500 Main st.
Hubbell, Frederick C.,	93 Whittier st.,	Traffic Manager, 88 Birnie ave.
Hudson, John W.,	54 Cortland st.,	Collector, Springfield Gas Co., 23 State st.
Huettner, Christian J.,	141 Union st.,	Grocer, 141 Union st.
Humberston, Harry,	402 Sumner ave.,	Clerk, Front st., Chicopee Falls.
Hunt, Charles E.,	71 Knox st.,	Tool Maker, Not Employed.
Hunt, Walter E.,	624 Belmont ave.,	Machinist, 39 Stockbridge st.
Hunter, James H.,	18 Herman st.,	Retired.
Huntting, Henry R.,	22 Temple st.,	Merchant, 29 Worthington st.
Hurd, Woodbury C.,	34 Whiting st.,	Tally Man, 68 Birnie ave.
Hurlbut, Watson W.,	16 Johnson st.,	Marble and Tile Worker, Cor. Stockbridge and Willow sts.
Hurley, Fred M.,	15 Walter st.,	Blacksmith, foot Depot st., Chicopee.
Hurley, James J.,	55 Washburn st.,	Shipping Clerk, 214 Birnie ave.
Huss, Eugene,	33 Edwards st.,	Book Binder, 29 Worthington st.
Hutchinson, Frank R.,	26 Westernview st.,	Publisher, 17 Worthington st.
Hutchinson, Herbert C.,	103 Prospect st.,	Salesman, 123 Bond st.
Hynes, Andrew T.,	55 Cass st.,	Linotype Operator, 32 Cypress st.
Hynes, Edward V.,	57 Cass st.,	Auto Repairman, Chicopee Falls.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Hynes, William F.,	43 Leyfred ter.,	Clerk, 376 Main st.
Ingersoll, Raymond J.,	79 Bowdoin st.,	Lithographer, 74 Park st.
Ingram, Chester W.,	64 Sherman ave.,	Machinist, 149 Wason ave.
Iredale, Harry W.,	51 Langdon st.,	Machinist, 225 Liberty st.
Isenburg, Louis,	46 Warriner ave.,	Clerk, 375 Main st.
Jack, George,	118 Bristol st.,	Division Superintendent, Metallic Drawing Roll Co., Indian Orchard.
Jackson, Frank W.,	123 Buckingham st.,	Grocer, 352 Bay st.
Jacobs, Cyril,	72 Greene st.,	Janitor, 195 State st.
Jacobson, Henry W.,	59 Sherman st.,	Chemist, Front st., Chicopee Falls.
Jefferson, George N.,	294 North Main st.,	Retired.
Jenkins, Charles A.,	559 Dickinson st.,	Retired.
Jenney, Ralph P.,	9 Florence st.,	Real Estate Dealer, 423 Main st.
Jennings, Harry B.,	182(A) William st.,	Mason, Not Employed.
Jensen, Paul Gerhard,	229 Orange st.,	Wood Worker, 74 Park st.
Jewett, George S.,	62 Irvington st.,	Superintendent, Fred T. Ley, Allen st
Jewett, Raymond D.,	75 Florence st.,	Insurance Clerk, 500 Main st.
Johnson, August,	52 Bevier st.,	Carpenter, Springfield Hospital.
Johnson, August,	95 Alden st.,	Carpenter, 95 Alden st.
Johnson, Charles W.,	128 Orleans st.,	Photographer, 128 Orleans st.
Johnson, Dana R.,	36 Kenwood ter.,	Sales Manager, 116 Broadway.
Johnson, Frank W.,	180 Worcester st., I. O.,	Foreman, Worcester st., I. O.
Johnson, Harold A.,	18 Sorrento st.,	Salesman, 310 Main st.
Johnson, Harry R.,	17 Bloomfield st.,	Tool Maker, Not Employed.
Johnson, John A.,	101 Hancock st.,	Chauffeur, Not Employed.
Johnson, John E.,	29 Woodside ter.,	Manufacturer, 19 Taylor st.
Johnson, Marshall R.,	76 Temple st.,	Druggist, 72 Main st.
Johnson, Oscar,	11 Albemarle st.,	Tool Maker, 837 State st.
Johnson, Walter E.,	224 State st.,	Insurance Agent, 419 Besse bldg.
Johnson, William,	797 Carew st.,	Manager, 161 Walnut st.
Jones, Fred R.,	542 White st.,	Salesman, 85 Warwick ave.
Jones, George L.,	37 Sargeant st.,	Clerk, 345 Main st.
Jones, Griffith H.,	44 Donald st.,	Waiter, Not Employed.
Jones, Herbert L.,	25 Rittenhouse ter.,	Salesman, 357 Main st.
Jones, Marshall M.,	313 Hancock st.,	Machinist, 39 Stockbridge st.
Jones, Vertran F.,	36 Highland st.,	Repairman, 283 Worthington st.
Jordan, Edward A.,	51 Spring st.,	Electrician, 385 North Main st.
Jordan, John D.,	12 Stebbins st.,	Contractor, 12 Stebbins st.
Jordan, William H.,	345 Central st.,	Pawn Broker, 426 Main st.
Joubert, Henry,	36 Benton st.,	Carpenter, Milton Construction Co., Boston.
Joyce, Thomas H.,	94 Bliss st.,	Laborer, 140 State st.
Judith, George W.,	328 Eastern ave.,	Polisher, 837 State st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Kaler, George H.,	266 Pearl st.,	Monotype Operator, Travelers Ins. Co., Hartford, Conn.
Kane, George J.,	106 Bond st.,	Druggist, 72 Main st.
Kane, Raymond E.,	67 Marlboro st.,	Salesman, 130 Lyman st.
Kaplinger, Charles H.,	832 Chestnut st.,	Retired.
Karnes, Robert F.,	111 Hampden st., I. O.,	Overseer, Front st., Indian Orchard Mill.
Karp, Louis E.,	305 Dickinson st.,	Real Estate Dealer, 305 Dickinson st.
Kearns, Peter F.,	22 Kendall ave.,	Steam Fitter, 20 Dwight st.
Keefe, Eugene F.,	199 Summer st.,	Printer, 32 Cypress st.
Keegan, John H.,	132 Myrtle st., I. O.,	Sales Manager, Advance Furnace and Engineering Co., near Allen st.
Keeney, Fred A.,	82 Alexander st.,	Grocer, 257 North Main st.
Kelley, J. Lewis,	188 Florida st.,	Architect, 207 Besse bldg.
Kellogg, Louis R.,	675 Belmont ave.,	Telegraph Operator, 283 Worthington st.
Kelly, Anthony T.,	440 Sumner ave.,	Blacksmith, 219 Dwight st.
Kelly, John Joseph,	36 Chapel st.,	Mason, 374 Main st.
Kelly, William M.,	39 Greenwood st.,	Chauffeur, 45 Emery st.
Kennedy, John A.,	39 Brookline ave.,	Insurance Agent, 293 Bridge st.
Kennedy, Stephen Joseph,	187 Carew st.,	Clerk, 39 State st.
Kennedy, Timothy,	75 Linden st.,	Molder, 191 Liberty st.
Keough, Edmund E.,	216 Pearl st.,	Advertising, American Writing Paper Co., Holyoke.
Kerr, James F.,	69 Bristol st.,	Blacksmith, 47 Dwight st.
Keyes, Henry S.,	46 Kimberly ave.,	Auditor, Page blvd.
Kibbe, Howard R.,	47 Westford circle,	Paper Box Designer, 29 Sheffield st.
Kilbride, Michael J., Jr.,	55 High st.,	Accountant, 9 Hampden st.
Kilgour, James,	22 Acushnet ave.,	Plumber, 31 Sanford st.
Kilpatrick, John K.,	48 Bevier st.,	Blacksmith, opp. Center Depot, Chicopee.
Kimpton, Dan J.,	336 Central st.,	Clerk, 500 Main st.
King, Edwin P.,	E. S. Parker st.,	Farmer, Parker st.
King, Richard J.,	31 Saratoga st.,	Manager, 651 Main st.
King, George P.,	74 Massachusetts ave.,	Foreman, 168 Birnie ave.
King, Howard A.,	123 Massachusetts ave.,	Gas Inspector, 35–37 State st.
King, Raymond H.,	128 Maynard st.,	Manufacturer, Baker Extract Co., Superior place.
King, Robert P.,	61 Clarendon st.,	Engineer, Page blvd.
King, William C.,	70 Orange st.,	Clerk, 236 Main st.
King, William H.,	30 Kendall st.,	Pipe Drier, 55 Morris st.
Kingsley, Edwin W.,	46 Bancroft st.,	Meat Cutter, Unemployed.
Kinsman, Louis G. H.,	38 Greenbrier st.,	Mason, 38 Greenbrier st.
Kirkpatrick, William E.,	19 Beacon st.,	Dealer in Boxes, 19 Beacon st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Kneeland, Frank A.,	35 Eldridge st.,	Expressman, 4 Liberty st.
Knight, Arthur,	16 Sachem st.,	Draftsman, Front st., Chicopee Falls.
Knight, Edward L.,	39 Kenwood Park,	Manager, Strand Theatre, Westfield.
Knight, Edwin Leroy,	81 Adams st.,	Grocer, 610 Main st.
Knights, Frederick M.,	374 Hancock st.,	Mechanic, Not Employed.
Knodel, Frederick W.,	46 Benton st.,	Lithographer, 140 Wilbraham ave.
Knowlton, Erving,	15 Cass st.,	Laborer, B. & A. Shops, West Springfield.
Knox, Charles D.,	159 Sumner ave.,	Bookkeeper, 88 Birnie ave.
Knox, Claude L.,	159 Sumner ave.,	Engineer. 295 Worthington st.
Koerber, Edward D.,	428 Eastern ave.,	Tool Maker, Stanley Rule and Level Co., New Britain, Conn.
Kramer, Albin M.,	171 Boston road,	Civil Engineer, 20 Cypress st.
Krause, Edwin,	141 Wilbraham road,	Manager, Page blvd.
Kuenzel, Christopher W.,	12 Goodrich st.,	Watch Maker, 324 Main st.
Kuhn, Ernest H.,	55 Harriet st.,	Printer, 149 Wason ave.
LaBaff, William O.,	8 Searle place,	Railroad Clerk, B.&A. Freight House.
LaBroad, Frank G.,	113 High st.,	Reamer, 39 Stockbridge st.
LaFrancis, Walter J.,	E. S. Barrison st.,	Carpenter, E. S. Barrison st.
Laing, Arthur,	51 Ventura st.,	Salesman, 65 Harrison ave.
Laird, James,	6 Warren ave.,	Watchman, Standard Oil Co., Albany st.
Lamb, Augustus C.,	52 Cornell st.,	Paper Manufacturer, Holyoke.
Lamb, James L.,	30 Bradford st.,	Druggist, 853 North st.
Lammon, Joseph A.,	33 Longview st.,	Assistant Manager, 376 Birnie ave.
Lamont, Willis O.,	82 Hall st.,	Agent, C. W. Adams, Agawam.
Lampson, George S.,	124 Buckingham st.,	Real Estate Broker, 310 Main st.
Lancaster, Roy E.,	57 Broad st.,	Sign Painter, 377 Dwight st.
Lanckton, Arthur L.,	41 Pasco road, I. O.,	Traveling Salesman, 137 Lyman st.
Landers, William,	112 Maynard st.,	Chauffeur, H. L. Whitcomb.
Lane, Albert J.,	92 Randolph st.,	Merchant, 117 Gardner st.
Lane, Elmer G.,	259 Massasoit st.,	Clerk, 354 Birnie ave.
Lane, George L.,	26 Santa Barbara st.,	Inspector, Not Employed.
Lane, Harry P.,	228 Belmont ave.,	President, 68 Hanover st.
Langdon, Grosvenor M.,	41 Forest st.,	Wood Worker, 74 Park st.
Lange, Alfred L.,	28 Claremont st.,	Paper Hanger, 28 Claremont st.
Laporte, M. Albert,	40 High st.,	Auto School, Broadway.
Laramee, Leon J.,	160½ Hancock st.,	Grocer, 162 Hancock st.
Larcher, William R.,	127 Greenwood st.,	Machinist, 21 Cypress st.
Larkin, Edward W.,	75 Bloomfield st.,	Estimator, 495 Main st.
Larose, Joseph,	224 Main st., I. O.,	Painter, Front st., I. O.
Larsen, William F.,	34 Lyndale st.,	Agent, 317 Main st.
Larson, Oscar Leonard,	41 Johnson st.,	Engineer, 662 North Main st.
Lathrop, Paul H.,	166 Buckingham st.,	Photographer, 166 Buckingham st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION
Lavigne, Valmace C.,	269 Centre st., I. O.,	Electrician, Chapman Valve Co., 203 Hampshire st., I. O.
Law, Edwin J.,	163 Phoenix ter.,	Stock Clerk, Front st., Chicopee Falls.
Lawler, William E.,	S. S. Geneva ave.,	Brazier, 837 State st.
Lawless, James F.,	52 Vinton st.,	Plumber, 171 Spring st.
Lawrence, Abbott,	26 Besse place,	Clerk, 371 Main st.
Lawrence, George W.,	72 Mapledell st.,	Bookkeeper, Front st., Chicopee Falls
Lawrence, Joseph A.,	26 Besse place,	Clerk, 837 State st.
Leach, Charles D.,	1340 Berkshire ave., I. O.,	Electrician, Ludlow Mfg. Co., Ludlow.
Leach, John J.,	135 Hampden st., I. O.,	Master Mechanic, Front st., I. O.
Leahy, Timothy J.,	10 Prospect ter.,	Metal Worker, Foot Church st., West Springfield.
Lee, John J.,	163 Summer st.,	Blacksmith, 163 Summer st.
Leech, Howard C.,	16 Amherst st.,	Manager, 16 Amherst st.
Legein, Armand J.,	127 Spring st.,	Merchant, 50 Howard st.
Legein, Fernand C.,	23 Warriner ave.,	Manufacturer, 50 Howard st.
Leith, Daniel,	44 Donald st.,	Electrician, Not Employed.
Lemay, Walter J.,	79 Pynchon st.,	Barber, 276 Worthington st.
Lemiden, Wilfred A.,	75 Alexander st.,	Motorman, 7 North Main st.
Lemley, Frank H.,	69 Clarendon st.,	Salesman, 69 Clarendon st.
Leonard, Archer F.,	71 Marengo Park,	Manager, 22 Stockbridge st.
Leonard, Arthur E.,	49 Prospect st.,	Storeroom Clerk, B. & A. Shops, West Springfield.
Leonard, John W.,	140 Franklin st.,	Conductor, 7 North Main st.
Letendre, Aime L.,	58 Wilbraham ave.,	Foreman, 182 Walnut st.
Lewis, Bert A.,	61 Ashley st.,	Shipping Clerk, 118 Fisk ave.
Likins, Horace,	41 Cherryvale ave.,	Manager, 10 Broadway.
Lilly, George E.,	16 Sunapee st.,	Foreman, 39 Stockbridge st.
Linnell, Herbert P.,	19 Florentine Gardens,	Engineer, Federal Corporation Co., Westfield.
Litch, Elmer D.,	30 Ashley st.,	Truckman, 30 Ashley st.
Littlefield, William A.,	59 Pembroke ave.,	Assembler, Foot Church st., West Springfield.
Livingston, James O.,	136 College st.,	Carpenter, 136 College st.
Locke, Edgar A.,	77 Elm st.,	Sheet Metal Worker, 143 Dwight st.
Locke, Walter M.,	41 Chase ave.,	Broker, 385 Main st.
Lockwood, Brower E.,	23 Pearl st. place,	Manager, 340 Bridge st.
Lohan, John,	529 Armory st.,	Bench Hand, 837 State st.
Lonergan, Edmond,	138 Greenwood st.,	Messenger, 500 Main st.
Long, Earl J.,	99 High st.,	Real Estate Broker, 374 Main st.
Long, Edward,	35 Underwood st.,	Motorman, 7 North Main st.
Long, James R.,	20 Woodside ter.,	Adjuster, 28 Worthington st.
Longden, N. Elmer,	242 Worcester st., I. O.,	Mill Operator, Hodges Carpet Co., Front st., I. O.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Loomis, Harry E.,	791 Worthington st.,	Machine Operator, Not Employed.
Lor, Alfred F.,	8 Parkwood st.,	Real Estate Agent, 374 Main st.
Lord, William S.,	25 Winthrop st.,	Pistol Maker, 39 Stockbridge st.
Lothrop, Harry M.,	1119 State st.,	Tool Designer, Rauch & Lang, Willimansett.
Loud, Lorenz A.,	65 Horace st.,	Engineer, 283–295 Worthington st.
Loughlin, John,	14 Demond ave.,	Shop Forger, Unemployed.
Lovejoy, Frank O.,	81 Berkshire st., I. O.,	Manager, Fiberloid Corporation, Worcester st., I. O.
Lovett, Thomas H.,	43 Rochelle st.,	Foreman, 662 North Main st.
Low, Fred,	210 High st.,	Office Manager, 203 Hampshire st., I. O.
Lucas, Joseph Loring,	32 Ruskin st.,	Salesman, 32 Ruskin st.
Luce, Thomas F.,	41 Alfred st.,	Millwright, Bosch Magneto Co., North Main st.
Ludden, William P.,	168 North Main st.,	Proprietor, 204 High st., Holyoke.
Ludwig, William J.,	21 Grant st.,	Meter Inspector, 36 Court st.
Lutz, Elmer E.,	336 Central st.,	Lithographer, 67 Taylor st.
Lyman, George M.,	34 Coleman st.,	Farmer, Wilbraham.
Lynch, Dennis J.,	87 Prospect st.,	Carpenter, 87 Prospect st.
Lynch, Edward M.,	2 Lincoln st.,	Electrician, Page blvd.
Lynch, John W.,	853 Chestnut st.,	Clerk, B. & A. Office, Charles st.
Lynch, Joseph M.,	693 Liberty st.,	Contractor, 693 Liberty st.
Lynch, Martin E.,	731 Carew st.,	Carpenter, 731 Carew st.
Lynch, Robert W.,	40 Arch st.,	Conductor, 5 North Main st.
Lyon, George R.,	42 Grand st.,	Machinist, 41 Mill st.
Lyon, Leon A.,	68 Waverly st.,	Motorman, 7 North Main st.
Lyon, Norman W.,	32 Maynard st.,	Assistant Chief Engineer, 121 State st.
Lyons, John J.,	35 Brookline ave.,	Clerk, Bosch Magneto Co., North Main st.
Lyons, Joseph F.,	31 Orlando st.,	Bookkeeper, 73 State st.
Lyons, Michael J.,	63 Tyler st.,	Butcher, 38 Harrison ave.
MacCarter, Allison H.,	12 Cortland st.,	Salesman, 55 Lyman st.
MacDonnell, Martin P.,	34 Lenox st.,	Installer, 283–295 Worthington st.
MacFarlane, Charles B.,	118 Albemarle st.,	Tool Maker, Page blvd.
Mack, James,	27 Underwood st.,	Wire Weaver, Warwick ave.
MacPhail, Arthur N.,	189 Oak st., I. O.,	Printer, Not Employed.
Madden, Michael J.,	276 Armory st.,	Lithographer, Warwick ave.
Mahoney, Daniel,	35 Brookline ave.,	Health Inspector, 36 Court st.
Mahoney, James J.,	300 Chestnut st.,	Salesman, 300 Chestnut st.
Mallory, Louis E.,	35 High st.,	Real Estate Broker, 318 Main st.
Malmstrom, Hugo N.,	86 Bloomfield st.,	Molder, Springfield Foundry, Oak st., I. O.
Manley, Samuel R.,	112 Michigan blvd.,	Carpenter, 739 Worthington st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Manning, James A.,	46 Massachusetts ave.,	Sales Manager, 121 State st.
Manning, James P.,	61 Linden st.,	Electrician, 319 Bridge st.
Manning, John J.,	34 Bancroft st.,	Electrician, 95 Broadway.
Mannix, Thomas P.,	855 Belmont ave.,	Clerk, 19–27 Worthington st.
Manser, Elmer E.,	285 Allen st.,	Carpenter, 285 Allen st.
Mansfield, Charles E.,	29 Horace st.,	Salesman, Taylor Toilet Co., Worthington st.
Mansfield, Harrison W.,	60 Hall st.,	Optician, 471 Main st.
Marceau, Ferdinand,	26 Berkshire st., I. O.,	Carpenter and Builder, 26 Berkshire st., I. O.
Marden, Walter J.,	131 Spring st.,	Receiving Clerk, 245 Chestnut st.
Marks, Sidney W.,	42 Cherryvale ave.,	Manager, 234 Main st.
Marr, Alfred C.,	150 Bond st.,	Machinist, 130 Birnie ave.
Marsh, Edward S.,	24 Alfred st.,	Conductor, 7 North Main st.
Marsh, George W.,	17 Congress st.,	Painter, 293 Bridge st.
Marshman, Arthur R.,	135 Spring st.,	Manager, 286 Main st.
Marsian, Ernest Jurgen,	439 Franklin st.,	Merchant, 439 Franklin st.
Martin, Philip H.,	126 Amherst st.,	Draftsman, General Electric Co., Pittsfield.
Mason, Frank B.,	11 Parkwood st.,	Loan Agent, 25 Harrison ave.
Maxwell, David,	21 Alfred st.,	Painter, 837 State st.
May, Albert W.,	142 Bloomfield st.,	Druggist, 803 Belmont ave.
Mayer, Carl August,	30 Arch st.,	Manager, Bosch Magneto Co., North Main st.
McAuley, Augustus,	36 Belvidere st.,	Lineman, 283–295 Worthington st.
McBride, Daniel,	506 Liberty st.,	Taxi Business, 506 Liberty st.
McBride, John J.,	60 Bradford st.,	Printer, 149 Wason ave.
McCann, Terrence,	48 Sheldon st.,	Meat Cutter, Unemployed.
McCann, Terrence T.,	48 Sheldon st.,	Unemployed.
McCarthy, Charles,	46 Calhoun st.,	Foreman, B. & M. R. R. Co.
McCarthy, Charles,	134 Tenth st.,	Watchman, Front st., Chicopee Falls.
McCarthy, Daniel F.,	1109 North st.,	Motorman, 7 North Main st.
McCarthy, Daniel J.,	20 Huntington st.,	Printer, 220 Franklin st.
McCarthy, Daniel J.,	12 Demond ave.,	Motorman, 7 North Main st.
McCarthy, Daniel T.,	98 Orange st.,	Laundry Worker, 21 Clinton st.
McCarthy, Dennis,	151 Colton st.,	Teamster, 128 Summer st.
McCarthy, George R.,	61 Hall st.,	Agent, 374 Main st.
McCarthy, James J.,	148 Hancock st.,	Auto Repairman, 830 State st.
McCarthy, Timothy,	18 Crane st.,	Foreman, 197 Armory st.
McCarthy, William,	68 Boylston st.,	Teamster, 96 Summer st.
McCarthy, William A.,	25 Webster st.,	Machinist, 624 Main st.
McCleary, Lionel,	545 Berkshire ave.,	Traveling Salesman, The Order of Railway Station Agents, Chicago, Ill.
McCleary, William L.,	196 King st.,	Contractor, 47 Patton st

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
McComb, Joseph,	22 Donald st.,	Clerk, 156 Wason ave.
McCormack, Raymond L.,	25 Hiawatha st.,	Bookkeeper, 555 State st.
McCrum, Edward H.,	79 Bond st.,	Night Watchman, Railroad row.
McDermott, James, Jr.,	125 Greenwood st.,	Stock Clerk, 48 Harrison ave.
McDermott, Thomas B.,	125 Greenwood st.,	Chauffeur, 44 Lyman st.
McDonald, Edward J.,	28 Roseland st.,	Motorman, 7 North Main st.
McDonald, Michael J.,	28 Roseland st.,	Motorman, 7 North Main st.
McDonald, Walter J.,	58 Calhoun st.,	Motorman, 7 North Main st.
McDonald, William J.,	137 Bond st.,	Tire Maker, Front st., Chicopee Falls.
McElwain, Charles C.,	46 Federal st.,	Trimmer, 57 Harrison ave.
McGee, William E. J.,	929 Liberty st.,	Sub-foreman, Foot Church st., West Springfield.
McGrath, Patrick,	176 Abbe ave.,	Mill Hand, Front st., Chicopee Falls.
McGuire, James,	319 Main st.,	Blacksmith, Ludlow Mfg. Co., Ludlow.
McIntosh, William Charles,	809 Carew st.,	Clerk, N.Y.N.H.&.H. Freight Office.
McIntyre, Harry H.,	810 Belmont ave.,	Clerk, 283–295 Worthington st.
McIntyre, Owen A.,	33 Cherryvale ave.,	Banker, 387 Main st.
McIntyre, Raymond K.,	207 Oakland st.,	Salesman, 29 Worthington st.
McKenna, Francis B.,	40 Underwood st.,	Salesman, 345 Main st.
McKillop, Peter J.,	74 Silver st.,	Merchant, 455 Rimmon ave.
McKinney, Edward J.,	259 Hancock st.,	Chauffeur, 259 Hancock st.
McKinnon, Frank,	41 Eleanor road,	Machinist, 39 Stockbridge st.
McLaughlin, William Edwin,	9 Carpenter court,	Motorman, 7 North Main st.
McMaster, George E.,	60 Catharine st.,	Merchant, 178 State st.
McMaster, William D.,	208 Hancock st.,	Ice Dealer, 212 Pendleton ave.
McNamara, Charles A.,	46 Mapledell st.,	Jeweler, 121 Worthington st.
McNulty, William J.,	127 Allen st.,	Clerk, 373–375 Main st.
McPartlin, Michael,	3 Sorrento st.,	Store Keeper, 121 Alderman st.
McQueen, George W.,	198 Belmont ave.,	Real Estate Dealer, 198 Belmont ave.
Mead, Edward E.,	44 Clifton ave.,	Carpenter, Not Employed.
Meadows, Harold,	100 School st.,	President, N. E. Steel Casting Co., East Longmeadow.
Medlicott, Robert L.,	52 High st.,	Manager, opp. Centre Depot, Chicopee.
Meehan, Patrick,	674 Main st.,	Printer, Not Employed.
Meehan, William H.,	129 Essex st.,	Cigar Maker, Railroad row.
Mehlhorn, Carl E.,	17 Home st.,	Mechanical Draftsman, 130 Birnie ave.
Merkel, Otto John,	317 Parker st.,	Foreman, Ludlow Mfg. Co., Ludlow.
Merriam, G. Frank,	205 Florida st.,	President and General Manager, Holyoke Card and Paper Co., Fisk ave.
Merrick, Herbert S.,	450 Chicopee road,	Manager, 442 Worthington st.
Merrill, Clifford H.,	192 Phoenix ter.,	Traffic Manager, 132-134 Cass st.
Merriam Frederick A.,	24 Alden st ,	Baker, Not Employed.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Messenger, Leon P.,	64 Saratoga st.,	Sheet Metal Worker, 837 State st.
Metcalf, William C.,	780 Chestnut st.,	Manager, 239 Chestnut st.
Mertz, Arthur K.,	73 Biltmore st.,	Bleacher, 33–51 Morris st.
Miles, Roger F.,	314 Springfield st.,	Weigher, 195 Armory st.
Miles, Timothy R.,	33 Sunapee st.,	Inspector, 837 State st.
Miller, Irving G.,	219 Oak Grove ave.,	Printer, 21 Cypress st.
Millett, Ralph H.,	559 Union st.,	Foreman, Springfield st., Chicopee.
Miner, W. Harold,	67 Lyndale st.,	Drafting Engineer, 156 Wason ave.
Miner, William H.,	75 Saratoga st.,	Plasterer, 75 Saratoga st.
Mitchell, Patrick J.,	203 Westford ave.,	Contractor, 23 Murray Hill ave.
Mitchell, Walter H.,	26 Lafayette st.,	Office Manager, 53 Hillman st.
Moakler, James C.,	80 Bowles st.,	Traveling Salesman, 411 Main st.
Mongeau, Paul,	rear 314 Main st., I. O.,	Druggist, 218 Main st., I. O.
Moody, Cleon A,,	129 Sherman st.,	Assembler, Page blvd.
Moody, Edwin F.,	15 Florence st.,	Salesman, 382 Main st.
Moran, Patrick J.,	20 Essex st.,	Street Sweeper, 36 Court st.
Moore, Herbert,	97 Johnson st.,	Window Cleaner, 97 Johnson st.
Moore, James W.,	21 Orleans court,	Laborer, B. & A. R. R. Shops, West Springfield.
Moore, Patrick J.,	574 Chicopee road,	Salesman, 45 Hampden st.
Moore, Richard G.,	37 Forest st.,	Builder, 374 Main st.
Moore, Walter E.,	125 Garfield st.,	Chief Clerk, 15 Court st.
Moran, Edward J.,	83 Johnson st.,	Bench Worker, Bosch Magneto Co., North Main st.
Moreau, Charles L.,	22 Franklin st.,	Foreman, B. & A. R. R. Co.
Moriarty, Ambrose,	74 Charles st.,	Laborer, N. Y. N. H. & H. R. R. Co
Moriarty, James Joseph,	124 Everett st.,	Horseshoer, 219 Dwight st.
Moriarty, Patrick J.,	14 Holland road,	Laundry Helper, Not Employed.
Moriarty, Thomas J., Jr.,	31 Webster st.,	Not Employed.
Moriarty, Timothy J.,	531 Armory st.,	Machinist, 837 State st.
Morrill, Alfred B.,	77 Bristol st.,	Manager, 17 Worthington st.
Morris, Albert W.,	54 Buckingham st.,	President, Morris Co., Union st., Bridgeport, Conn.
Morrissey, James Joseph,	49 Prospect st.,	Machinist, Bosch Magneto Co. North Main st.
Morrissey, James R.,	246 Main st., I. O.,	Merchant, 141 Main st., I. O.
Morrison, Arthur J.,	107 Spring st.,	Office Man, Guernsey Westbrook Co., Hartford, Conn.
Morse, Frank W.,	W. S. Davenport st.,	Clerk, 165 Lyman st.
Morse, Louis L.,	15 Hawley st.,	Cost Clerk, Not Employed.
Morse, Raymond, E.,	67 Ventura st.,	Clerk, 845 Belmont ave.
Morse, Valentine B.,	174 Essex st., I. O.,	Clerk, Chapman Valve Co., 203 Hampshire st., I. O.
Morton, Frederick G.,	15 Donald st.,	Chauffeur, Not Employed.
Moss, Henry R.,	23 Newman st.,	Salesman, Not Employed.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Motherway, John W.,	25 North Main st.,	Steam Fitter, 220 Dwight st.
Mott, Warren H.,	111 Bancroft st.,	Foreman, Bosch Magneto Co., North Main st.
Moxom, Ralph P.,	98 College st.,	Shipping Clerk, Handy Chocolate Co. Berkshire st.
Moylan, John J.,	404 Armory st.,	Painter, Not Employed.
Moylan, Thomas F.,	393 Armory st.,	Laborer, 36 Court st.
Mullen, Michael R.,	17 Sumner ter.,	Silk Buyer, 440 Main st.
Munder, Charles F.,	69 Maplewood ter.,	Manufacturer, 30 Taylor st.
Munger, Charles H.,	399 Orange st.,	Inspector, Foot Church st., West Springfield.
Munger, Fred B.,	78 Drexel st.,	Machinist, 48 Harrison ave.
Munroe, Donald M.,	415 Maple st.,	Reporter, 32 Cypress st.
Murphy, Daniel J.,	25 Wilbraham ave.,	Telegrapher, 387 Main st.
Murphy, Edward C.,	62 Laurel ave.,	Freight Handler, B.&M. Freight House.
Murphy, George F.,	91 Beaumont st.,	Mechanic, 36 Court st.
Murphy, Jeremiah,	47 Home st.,	Mason, 47 Home st.
Murphy, John F.,	143 Belmont ave.,	Salesman, 16 Superior place.
Murphy, John H.,	70 Grosvenor st.,	Plumber, Foot Church st., West Springfield.
Murphy, John Joseph,	520 Armory st.,	Tire Maker, Front st., Chicopee Falls.
Murphy, Joseph,	55 North Main st.,	General Foreman, B. & A. Shops, West Springfield.
Murphy, Redmond,	133 Franklin st.,	Furnace Operator, B. & A. Shops, West Springfield.
Murphy, Thomas H.,	107 Orchard st.,	Iron Molder, 164 Birnie ave.
Murphy, Timothy James,	178 Liberty st.,	Mason, Not Employed.
Murphy, William E.,	121 Bond st.,	Machinist, B. & A. Shops, West Springfield.
Murray, William J.,	46 Albemarle st.,	Supervisor, Cor Broad and Hanover sts.
Myers, William C.,	41 Beacon st.,	Painter, 41 Beacon st.
Napier, Alexander W.,	91 Mulberry st.,	Not Employed.
Neal, Christopher R.,	14 Rittenhouse ter.,	Real Estate Dealer, 14 Rittenhouse ter.
Needham, Lawton Brooks,	29 Arch st.,	Clerk, 318 Main st.
Neff, Arthur D.,	25 Albemarle st.,	Advertising Manager, 349-359 Main st.
Neidel, Alfred E.,	48 Fort Pleasant ave.,	Foreman, 21 Railroad st.
Neil, George W.,	201 Dickinson st.,	Lumber Dealer, 201 Dickinson st.
Neiss, William F.,	70 Maynard st.,	Engraver, 333 Main st.
Nelen, John B.,	67 Northampton st.,	Clerk, 500 Main st.
Neville, James,	53 Palmer ave.,	Tool Maker, Not Working.
Newell, John M.,	97½ High st.,	Real Estate Broker, 97½ High st.
Newton, Charles,	25 Stebbins st.,	Repairman, 125 Liberty st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Newton, Cheney F.,	53 Chase ave.,	Foreman, 53 Chase ave.
Newton, Chester P.,	627 Chestnut st.,	Mechanical Engineer, 318 Main st.
Newton, Henry H.,	69 Central st.,	Chauffeur, 521 State st.
Newton, J. Howard,	180 Belmont ave.,	Salesman, Fiberloid Co., Worcester st., I. O.
Neylon, Daniel A.,	162 Northampton ave.,	Proprietor, 246 Main st.
Neylon, John Jr.,	112 Eastern ave.,	Plumber, 32 Dwight st.
Nickerson, Raymond O.,	173 High st.,	Merchant and Broker, New York and Boston Houses.
Niles, Edwin J.,	30 Myrtle st.,	Accountant, 21 Besse place.
Niles, Orville W.,	43 Calhoun st.,	Salesman, Retired.
Nolan, Daniel J.,	40 Franklin st.,	Blacksmith, 7 North Main st.
Nolan, James D.,	280 Franklin st.,	Machinist, 662 North Main st.
Nolan, James F.,	39 Morgan st.,	Motorman, 7 North Main st.
Nolan, John A.,	204 Centre st., I. O.,	Bookkeeper, Not Employed.
Noonan, Edward J.,	353 King st.,	Proprietor, 353 King st.
Norman, Ernest J.,	73 Fort Pleasant ave.,	Mechanic, 39 Stockbridge st.
Northway, Edward O.,	24 Crystal ave.,	Shipping Clerk, 41 Hampden st.
Norton, Ralph H.,	140 Johnson st.,	Clerk, B. & A. R. R. Co.
Nugent, Frank A.,	20 Greene st. ave.,	Mason Tender, Not Employed.
Nutter, Sagar Henry,	130 Hampshire st., I. O.,	Stock Clerk, Fiberloid Co., Worcester st., I. O.
Nye, Henry C.,	7 Piney place,	Caretaker, Forest Park.
Oakes, George L.,	44 Webster st.,	Laborer, Union Station.
Oakes, Lyman E.,	32 Erie st.,	Carpenter, 32 Erie st.
Oatley, Frederick L.,	5 Crystal ave.,	Foreman, 74 Park st.
Ober, Granville G.,	3 Salem st.,	Bookkeeper, 11 Oak Grove ave.
Ober, Vernon B.,	9 Pearl st. place,	Clerk, Chicopee Mfg. Corp., Cor. West Main and Main sts., Chicopee Falls.
O'Brien, David,	106 Tenth st.,	Blacksmith, 19 Taylor st.
O'Brien, David M.,	369 Armory st.,	Signal Man, B. & A. R. R.
O'Brien, Eugene A.,	457 Armory st.,	Conductor, 7 North Main st.
O'Brien, Francis R.,	53 Colonial ave.,	Clerk, B. & A. Freight Office.
O'Brien, James F.,	216 Armory st.,	Motorman, 7 North Main st.
O'Brien, Joseph A.,	560 Liberty st.,	Salesman, Proctor & Gamble, Boston.
O'Connell, Edward J.,	28 Leonard st.,	Accountant, 495 Main st.
O'Connell, Frank A.,	635 State st.,	Traffic Manager, White & Wyckoff, Holyoke.
O'Connell, Walter H.,	15 Temple st.,	Bookkeeper, Federal Corporation, Westfield.
O'Connell, William,	197 Wilbraham ave.,	Lumberman, 850 State st.
O'Connor, John A.,	136 Hampden st., I. O.,	Retired.
O'Donnell, Bartholomew J.,	250 Franklin st.,	Machinist, Not Employed.
O'Donnell, Edward T.,	222 Armory st.,	Traveling Salesman, 310 Main st.

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NAME	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Ogden, Frank B.,	N. S. Boston road,	Farmer, Boston road.
O'Hare, Patrick J.,	733 Carew st.,	Foreman, 662 North Main st.
O'Keefe, Leo G.,	12 Crown st.,	District Manager, 476 Main st.
O'Leary, Daniel,	68 Johnson st.,	Motorman, 7 North Main st.
Oliver, Robert E.,	162 Jasper st.,	Manager, Spfd. Gas Light Co.
Olson, Emil A.,	107 North Main st.,	Mechanic, 21 Cypress st.
O'Neil, Andrew,	307 Armory st.,	Shipper, Sunshine Biscuit Co.
O'Neil, Charles H.,	657 Main st.,	Painter, Spfd. Coach Works, North Main st.
O'Reilly, Charles E.,	18 Coomes ave.,	Barber, 184 Worthington st.
Osborn, William B.,	63½ Monroe st.,	Barber, 6 Cross st.
Osborne, Charles H.,	135 Cambridge st.,	Superintendent, Chandler Co., Napier st.
Osborne, Raymond H.,	382 White st.,	Machinist, 837 State st.
Oyler, R. William,	406 Mill St.,	Milkman, 302 Locust st.
Packard, Edward S.,	339 Belmont ave.,	Foreman, 36 Court st.
Paddock, John F.,	15 Massachusetts ave.,	Traveling Salesman, 15 Massachusetts ave.
Page, George A.,	34 Orange st.,	Salesman, 244 Main st.
Page, Leslie B.,	932 Hickory st.,	Draftsman, Bosch Magneto Co., North Main st.
Paine, Jesse,	17 Clark st.,	Mechanic, 39 Stockbridge st.
Palmer, Charles A.,	27 Home st.,	Shipper, 55 Governor st.
Palmer, George E.,	198 Belvidere st.,	Machinist, 39 Stockbridge st.
Palmer, Philip L.,	11 Priscilla st.,	Salesman, 289 Main st.
Parent, Horace, Jr.,	13 Beaudry ave.,	Machinist, Chapman Valve Co., 203 Hampshire st., I. O.
Parker, Diamond W.,	95 Chestnut st.,	Fireman, 153 Chestnut st.
Parker, John W.,	302 Bay st.,	Real Estate Agent, 281 State st.
Parker, Lawrence W.,	278 Orange st.,	Milk Peddler, 120 Oakland st.
Parks, Marvin B.,	120 Hampden st., I. O.,	Foreman, Hodges Fiber Carpet Co., Front st., I. O.
Parsons, George W.,	29 Thompson st.,	Sales Manager, Fiberloid Co., Worcester st., I. O.
Parsons, William R.,	122 Amherst st.,	Treasurer, 93 Dwight st.
Partridge, Arthur M.,	308 Chicopee road,	Foreman, Front st., Chicopee Falls.
Patterson, William J.,	30 Foster st.,	Clerk, Page blvd.
Patterson, Winthrop H.,	3 Dorchester st.,	Mechanical Engineer, 20 Bond st., Holyoke.
Paul, William E.,	30 Central st.,	Cigar Maker, 459 Worthington st.
Paymer, Abraham E.,	17 Trafton road,	Optician, 238 Main st.
Payne, George H.,	42 Kenwood Park,	Sign Painter, 486 Main st.
Payne, Raymond A.,	18 Coomes ave.,	Insurance Underwriter, Travelers Insurance Co., Hartford, Conn.
Payne, Richard S.,	20 Westford ave.,	Foreman, 48 Harrison ave.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Pease, Austin H.,	39 Forest Park ave.,	Clerk, 97 Wason ave.
Pease, Ethwald C.,	126 Hampshire st., I. O.,	Clerk, Ludlow Mfg. Co., Ludlow.
Pease, George A.,	158 Bowles st.,	Manager, Somers, Conn.
Pease, Orlo R.,	436 Central st.,	Merchant, 195 Pine st.
Pelletier, Edward E.,	61 High st.,	Manager, 293 Bridge st.
Pendergast, Edward J.,	264 Dwight st. ext.,	Lathe Hand, 837 State st.
Penn, Marcus,	533 Dickinson st.,	Real Estate Dealer, 317 Dwight st.
Pepper, Robert C.,	42 Sumner ter.,	Salesman, 307 Main st.
Pepper, Walter M.,	27 Longfellow ter.,	Building Inspector, 283–295 Worthington st.
Perkins, Charles H.,	475 Bay st.,	Molder, Page blvd.
Perkins, George S.,	21 Forest st.,	Chief Engineer, 662 North Main st.
Perkins, John M.,	77 Fairfield st.,	Superintendent, McNabe & Harlem Co., New Jersey.
Perkins, Lyman H.,	91 Park st.,	Clerk, 373-375 Main st.
Perry, Walter E.,	175 Florida st.,	Salesman, Cor. Cabot and Mill sts., Holyoke.
Peterson, Arthur W.,	92 Bridge st.,	Cigar Maker, 337 Worthington st.
Peterson, Ray W.,	18 Hughes st.,	Salesman, 78 Hillman st.
Phelon, Austin W.,	308 Bay st.,	Accountant, Front st., Chicopee Falls.
Phelan, Edward J.,	162 Eastern ave.,	Barrel Dealer, 162 Eastern ave.
Philbrick, Frank J.,	143 Oakland st.,	Linotyper, 32 Cypress st.
Phillips, George W.,	255 Main st., I. O.,	Inspector, Hodges Fibre Carpet Co., Front st., I. O.
Pierce, Charles A.,	30 Washington road,	Cashier, 480 Main st.
Pierce, George B.,	27 Kenwood ter.,	Buyer, 348 Main st.
Pierce, Leon L.,	7 Armory st.,	Hotel Manager, 106 West 38th st., New York, N. Y.
Pierce, Raymond T.,	10 Harriet st.,	Laundry Driver, 241 North Main st.
Pike, Chester J., Jr.,	143 Belmont ave.,	Manager, 211 Worthington st.
Pike, Lewis A.,	1663 North st.,	Foreman, 214 Birnie ave.
Pinder, George R.,	81 Greene st.,	Gardener, 32 Pine st.
Pinney, Edward J.,	95 Dartmouth st.,	Contractor and Builder, 374 Main st.
Plate, Henry William,	3 Niagara st.,	Photo-engraver, 77 Worthington st.
Poinier, Elmer W.,	119 Westford ave.,	Foreman, Bosch Magneto Co., North Main st.
Pomeroy, Harry W.,	84 East Alvord st.,	Plumber Contractor, 6 Whittier st.
Pool, James C.,	195 Dunmoreland st.,	Designer, 168 Bridge st.
Poole, George W.,	103 Greene st.,	Chef, 12 Sanford st.
Pooley, Arthur H.,	308 Eastern ave.,	Grocer, Not Employed.
Pooley, William H.,	151 High st.,	Painter, for the city.
Potter, Clarence,	118 Colton st.,	Laborer, Page blvd.
Potter, Rial S.,	187 Marion st.,	Chauffeur, 187 Marion st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Powell, Benjamin,	109 Allen st.,	Wood Worker, 109 Allen st.
Powers, George H.,	39 Grant st.,	Druggist, 946 Worthington st.
Powers, Harry F.,	147 Bond st.,	Not Employed.
Powers, Joseph F.,	172 Allen st.,	Electrician, 39 Stockbridge st.
Powers, Lewis J.,	116 Pearl st.,	President, 149 Wason ave.
Powers, Wallace O.,	146 College st.,	Machinist, Unemployed.
Pratt, Edward J.,	18 Wendell place,	Laborer, Not Employed.
Pratt, George E.,	125 Walnut st.,	Shop Hand, foot State st.
Pratt, Henry J.,	21 Niagara st.,	Contractor, 942 Main st.
Premont, Arthur E.,	30 Fremont st.,	Upholsterer, 30 Fremont st.
Prescott, Austin G.,	28 Marlborough st.,	Garment Worker, 88 Birnie ave.
Preston, Frank H.,	210 Atwater road,	Appraiser, 63 Elm st.
Prevost, John W.,	963 Sumner ave.,	Builder, 963 Sumner ave.
Prevost, William J.,	344 Chestnut st.,	Barber, 194 Chestnut st.
Priest, Charles,	48 Clifton ave.,	Gardener, 357 Maple st.
Priest, John A.,	38 Dresden st.,	Clerk, Spfd. Commercial Body Co., 385 Liberty st.
Prouty, Alfred D.,	1492 Wilbraham road,	Carpenter, 1492 Wilbraham road.
Quigley, William A.,	59 East Alvord st.,	Salesman, Page blvd.
Quilty, Jeremiah P.,	62 Temple st.,	Tailor, 289 Main st.
Quimby, Irving A.,	26 Pearl st.,	Merchant, 9 Hampden st.
Quinlan, Charles P.,	33 Demond ave.,	Salesman, 24 James st., Albany, N. Y.
Quinn, Hubert J.,	24 Middlesex st.,	Ice Dealer, 24 Middlesex st.
Quinn, Patrick F.,	99 Elliott st.,	Cigar Maker, 459 Worthington st.
Quinn, Raymond J.,	420 Main st.,	Broker, 420 Main st.
Quinn, Thomas,	273 North Main st.,	Cigar Maker, 459 Worthington st.
Radner, Louis,	43 Jefferson av.,	Treasurer, 274 Main st.
Radner, Victor,	35 Trafton road.,	Owner, 274 Main st.
Ramsdell, Frank B.,	24 Rittenhouse ter.,	Steam Fitter, Front st., Chicopee Falls.
Randall, Clarence T.,	133 Wilbraham ave.,	Assembler, 837 State st.
Rano, Willie O.,	475 Main st.,	Carpenter, Not Employed.
Rapisarda, Alfred F.,	39 Granville st.,	Baker, 8 Colton st.
Rathbun, Neale W.,	804 Belmont ave.,	Salesman, 721 Worthington st.
Rauch, Charles,	64 Bevier st.,	Cigar Maker, 459 Worthington st.
Ray, G. Avery,	42 Bay st.,	Real Estate Agent, 42 Bay st.
Raymond, Charles H.,	14 Palmer ave.,	Elevator Man, 36 Morris st.
Reach, Milton B.,	229 Rimmon ave.,	Manager, Opp. Center Depot, Chicopee.
Reardon, Albert,	54 Patton st.,	Motorman, 7 North Main st.
Reardon, Edward J.,	291 Oakland st.,	Machinist, 74 Park st.
Reardon, James W.,	31 Alfred st.,	Foreman, B. & M. R. R. Co.
Reddie, David H.,	7 Cornell st.,	Sales Manager, 39 Stockbridge st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Reed, Benjamin G.,	26 Maynard st.,	Milk Peddler, 132–134 Cass st.
Reed, John P.,	362 Hancock st.,	Manager, 477 Main st.
Rees, David H.,	18 Sumner ave.,	Typewriter, 282 Worthington st.
Reilly, Joseph A.,	10 Water st., I. O.,	Not Employed.
Remington, William M.,	127 Forest Park ave.,	Not Employed.
Reopell, Albert V.,	169 Maple st.,	Auto Agent, Cor. State and Hancock sts.
Rettew, Harvey W.,	1007 Berkshire ave., I. O.,	Candy Maker, Berkshire ave., I. O.
Rey, William K.,	210 High st.,	Foreman, 31–45 Hampden st.
Reynders, Arthur B.,	200 Buckingham st.,	Manager, Page blvd.
Reynolds, Ambrose H.,	27 Morris st.,	Salesman Agent, National Biscuit Co., Holyoke.
Reynolds, James E.,	27 Alfred st.,	Car Inspector, N. Y. N. H. &. H. Co.
Rice, George W.,	64 Benton st.,	Manufacturer, 64 Benton st.
Rice, John M.,	12 Orlando st.,	Production Clerk, Blake Noles Co., East Cambridge.
Rice, Newton A.,	176 College st.,	Machinist, 39 Stockbridge st.
Rice, Walter F.,	53 Atwater ter.,	Treasurer, 307 Main st.
Rich, Henry F.,	199 High st.,	Clerk, 530–540 Main st.
Rich, Howard W.,	64 Brunswick ave.,	Milk Salesman, 120 Oakland st.
Richard, Harry J.,	11 Murray Hill ave.,	Druggist, 194 Main st.
Richards, Clark L.,	115 Firglade ave.,	Agent, 317 Main st.
Richards, Harold H.,	34 Reed st.,	Map Publisher, 167 Dwight st.
Richards, Louis H.,	67 Euclid ave.,	Sales Manager, 343 Bridge st.
Richmond, Edward A.,	89 Walnut st.,	Druggist, 54 Walnut st.
Richmond, Frank B.,	191 Pine st.,	Not Employed.
Riga, Harley M.,	51 Itendale st.,	Secretary, 626 Main st.
Rivers, Peter A.,	66 Pynchon st.,	Metal Worker, 265–267 Summer st.
Robare, William M. J.,	13 Mason st.,	Hardener, 837 State st.
Robbins, Arthur M.,	55 Earl st.,	Chauffeur, 30 Kimberly ave.
Robbins, Ransom E.,	36 Rush ave.,	Assistant Superintendent, 46 Harrison ave.
Robbins, Willie E.,	62 Virginia st.,	Assembler, 39 Stockbridge st.
Roberts, Adonias,	37 Alfred st.,	Machinist, Foot Church st., West Springfield.
Roberts, Charles W.,	52 Mason st.,	Tool Maker, 837 State st.
Roberts, George A.,	85 Maynard st.,	Commissioner, Soldiers' Relief, 36 Court st.
Roberts, Godfrey,	27 Hyde ave.,	Builder, 27 Hyde ave.
Robertson, Fred L.,	19 Sachem st.,	Chemist, 137 State st.
Robertson, Harry G.,	720 Sumner ave.,	Machinist, Page blvd.
Robertson, Oliver P.,	587½ Main st.,	Upholsterer, 587½ Main st.
Robillard, Joseph Alfred,	19 Alfred st.,	Cabinet Maker, Skinner Organ Co., Westfield.
Robinson, Daniel E.,	50 Bradford st.,	Stockman, 668 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Robinson, William A. H.,	44 Byers st.	Jeweler, 331 Main st.
Rochford, John W.,	W. S. Parker st.,	Retired.
Rodhouse, Walter F.,	83 Northampton ave.,	Manufacturer, 216 Worthington st.
Rollins, Harvey E.,	14 Osgood st.,	Oiler, 123 Carew st.
Ronaldson, George R.,	29 Kenwood Park,	Salesman, Winter st., Holyoke.
Rooney, Frank T.,	265 Chestnut st.,	Bottler, 183 Liberty st.
Root, William O.,	435 Walnut st.,	Real Estate Dealer, 25 Harrison ave.
Rosenberg, August C.,	11 Dawes st.,	Paper Hanger and Painter, 11 Dawes st.
Rowe, Walter C.,	128 Union st.,	Millwright, Not Employed.
Rowland, Frank L.,	425 Sumner ave.,	Assistant Treasurer, Foot Church st., West Springfield.
Rowley, Albert C.,	171 Oak Grove ave.,	Machinist, 39 Stockbridge st.
Rowley, Arthur W.,	33 High st.,	Real Estate Agent, 356 Main st.
Rowley, Robert H.,	12 Manchester ter.,	Carpenter, 12 Manchester ter.
Roy, Fred,	174 Hampden st., I. O.,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Roy, Marshall J.,	168 Main st., I. O.,	Real Estate Agent, 168 Main st., I. O.
Ruppel, John W.,	32 Jefferson ave.,	Confectioner, 69 Main st.
Ruscoe, William H.,	261 North Main st.,	Proprietor, 261 North Main st.
Russell, Edward J.,	87 Grover st.,	Photographer, 87 Grover st.
Russell, Herbert A.,	44 Clark st.,	Insurance Agent, 274 Main st.
Russell, John E.,	183 Northampton ave.,	Traveling Salesman, 49 Lyman st.
Russell, William P.,	25 Clayton st.,	Iron Molder, 191–211 Liberty st.
Ryan, Julius,	29 Elizabeth st.,	Electrician, 36 Court st.
Sackett, Herbert R.,	70 Vermont st.,	Salesman, 70 Vermont st.
Salvi, Ferdinando,	23 Collins st.,	Shop Hand, 837 State st.
Samble, Harry,	331 Belmont ave.,	Laundry Man, 333 Belmont ave.
Sampson, Frederick H.,	61 Sargeant st.,	Traveling Salesman, 162½ Chestnut st.
Sanburn, Justus C.,	49 Florentine Gardens,	Chemist, Strathmore Paper Co., Mittineague.
Sanford, Arthur O.,	70 Calhoun st.,	Advertising Agent, 70 Calhoun st.
Saul, William Frederick,	1035 Berkshire st., I. O.,	Electrician, Fiberloid Co., Worcester st., I. O.
Savaria, Edward N.,	61 Chester st.,	Steam Fitter, 31 Sanford st.
Sawyer, Harry A.,	25 Burton st.,	Manager, 289 Main st.
Schlesinger, Frank A.,	67 Sumner ave.,	Assistant Treasurer, 195 State st.
Schmuck, John R.,	52 Freeman ter.,	Machinist, 130 Birnie ave.
Schomburg, Frederick H.,	128 Oak Grove ave.,	Lithographer, 67 Taylor st.
Schrade, Clyde Lewis,	29 Florida st.,	Linotype Operator, 338 Worthington st.
Schultz, Isaac,	34 Applewood place,	Cap Maker, 147 Chestnut st.
Schultz, Wilbert J.,	57 Rittenhouse ter.,	Safety Engineer, 275 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Schumaker, Leonard,	28 Herman st.,	Lumber Worker, 145 State st.
Schwarz, Wolfgang,	76 Bay st.,	Foreman, 449 Bay st.
Scully, William F.,	32 Byers st.,	President, Advance Furnace and Engineering Co., near Allen st.
Seel, Frederick,	23 Girard ave.,	Brick Layer, Not Employed.
Severy, William G.,	41 Trafton road,	Salesman, Dunn Pen Co., New York, N. Y.
Sewell, Robert L.,	917 Sumner ave.,	Lithographer, 140 Wilbraham ave.
Seybolt, Francis E.,	97 Albemarle st.,	Treasurer, 387 Main st.
Seymour, Elmer C.,	184 Marion st.,	Cost Clerk, 86 Broadway, Chicopee Falls.
Shanley, Patrick J.,	73 Oak st., I. O.,	Draftsman, Chapman Valve Co., 203 Hampshire st., I. O.
Shannon, James L.,	16 Stratford ter.,	Manager, Center st., Chicopee.
Shannon, Walter J.,	29 Dale st.,	Draftsman, 293 Bridge st.
Sharp, George B.,	51 Spring st.,	Traveling Salesman, I. Call, Binghamton, N. Y.
Shaw, Albert E.,	774 State st.,	Department Manager, 500 Main st.
Shaw, Alfred,	165 Essex st., I. O.,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Shaw, Benjamin J.,	125 St. James circle,	Real Estate Agent, 125 St. James circle.
Shaw, Burpee Eugene,	163 Marion st.,	Office Manager, 33 Harrison ave.
Shaw, Ernest S.,	383 Birnie ave.,	Machinist, Bosch Magneto Co., North Main st.
Shaw, Frank E.,	34 Congress st.,	Baker, 282 Main st.
Shaw, James H.,	192 Oakland st.,	Superintendent, 30 Lyman st.
Shaw, Myron R.,	43 Harvard st.,	Draftsman, Front st., Chicopee Falls.
Shea, Augustus A.,	66 Sorrento st.,	Electrical Contractor, 8 Besse court.
Shea, Frank H.,	791 Main st.,	Printer, 377 Dwight st.
Shea, Jeremiah G.,	1308 North st.,	Brick Layer, Cor. Sumner ave. and White st.
Shea, John J.,	56 Langdon st.,	Shipping Clerk, International Insulating Co., Mechanic st.
Shea, John V.,	96 Wilbraham road,	Clerk, 837 State st.
Shea, Patrick J.,	56 Sheldon st.,	Brick Layer, 374 Main st.
Shea, Patrick Michael,	119 Patton st.,	Foreman, B. & M. Freight House, Cypress st.
Shea, Stephen D.,	96 Hancock st.,	Manager, 96 Hancock st.
Shea, William M.,	132 Franklin st.,	Salesman, 387 Main st.
Shean, Robert E.,	18 Adams st.,	Repairman, 211 Main st.
Sheckler, Frank E.,	760 Chestnut st.,	Manager, 464 Worthington st.
Sheehan, Paul,	45 Hawthorne st.,	Cigar Maker, 459 Worthington st.
Sheehan, Thomas F.,	25 Vine st.,	Chauffeur, 390–396 Main st.
Sheehan, Thomas J.,	41 Linden st.,	Manager, 307 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Shepard, Albert A.,	28 Brookline ave.,	Machinist, 48 Harrison ave.
Shepard, William H.,	36 Sargeant st.,	District Passenger Agent, 244 Main st.
Shepardson, Merton A.,	64 Avon place,	Proprietor, 67 Taylor st.
Sherman, Edward,	27 Firglade ave.,	Broker, 27 Firglade ave.
Shinks, William E.,	1086 State st.,	Upholsterer, Heywood st.
Shoughrue, John T.,	70 Charles st.,	Night Watchman, 283 Worthington st.
Shuart, John D.,	403 Maple st.,	Purchasing Agent, 2 New Bridge st., West Springfield.
Shumway, Frederick A.,	48 Johnson st.,	Salesman, 53 Osgood st.
Shumway, Herbert A.,	62 Biltmore st.,	Musician, 11 Elm st.
Sibley, Julius R.,	69 Alexander st.,	Clerk, 7 North Main st.
Silbert, Philip S.,	55 Churchill st.,	Merchant, 244 Main st.
Sime, James Wright,	255 Main st., I. O.,	Machinist, Metallic Drawing Roll Co., Front st., I. O.
Simmons, Edgar S.,	306 Hancock st.,	Paper Manufacturer, United States Envelope Co.
Simmons, William J.,	53 Montmorenci st.,	Bookkeeper, 293 Bridge st.
Simpson, Christopher G.,	220 Pearl st.,	Circulating Manager, 29 Worthington st.
Skinner, Arthur O.,	8 Terrence st.,	Tire Tester, Front st., Chicopee Falls.
Slater, Alburtus N.,	216 Eastern ave.,	Chauffeur, 538 Main st.
Slater, Hugh Alexander,	184 Eastern ave.,	General Repairman, 786 State st.
Slattery, Maurice,	121 Greenwood st.,	Painter, B. & A. Shops, West Springfield.
Smith, Allyn M.,	104 Beaumont st.,	Foreman, 40 Bliss st.
Smith, Edward H.,	1070 North st.,	Machinist, Foot Church st., West Springfield.
Smith, Harry K.,	909(A) State st.,	Auto Dealer, 824 State st.
Smith, Henry W.,	165 Eddy st.,	Machinist, Not Employed.
Smith, Herbert E.,	31 Belmont ave.,	Foreman, 15 Mill st.
Smith, John D.,	35 Dartmouth st.,	Druggist, 279 Main st.
Smith, Joseph Edward,	336 Central st.,	Telephone Clerk, 283–295 Worthington st.
Smith, Marcus H.,	179 Oak Grove ave.,	Manufacturer, 40 Taylor st.
Smith, Rodney Lawrence,	321 Long Hill st.,	Manufacturer, 23 Hampden st.
Smith, Sam,	34 Allendale st.,	Merchant, 29 Main st.
Smith, William J.,	276 Eastern ave.,	Mechanic, 837 State st.
Snell, William E.,	25 Colonial ave.,	Salesman, 538–540 Main st.
Snow, Arthur L.,	248 Pearl st.,	Bookkeeper, 329 Main st.
Sollace, George E.,	64 John st.,	Machinist, 38 Walter st.
Southmayd, Leon N.,	24 Eton st.,	Manager, Front st, Chicopee Falls.
Sparrow, Frederick E.,	50 Plainfield st.,	Assistant Superintendent, General Electric Co., Plainfield st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Spaulding, John,	127 Cedar st.,	Clerk, 503 Sumner ave.
Spear, Fred L.,	93 Dawes st.,	Stock Checker, Foot Church st., West Springfield.
Spear, Raymond L.,	38 Leyfred ter.,	Manager, 327 Main st.
Spellman, Joseph H.,	155 High st.,	Conductor, 7 North Main st.
Spencer, Francis H.,	218 Washington blvd.,	Agent, 195 State st.
Spencer, Frank S.,	33 Albemarle st.,	Foreman, 850 State st.
Spencer, Percy F.,	1143 State st.,	Traveling Salesman, Blodgett & Co., Boston.
Spittal, William L.,	106 Massasoit st.,	Wire Weaver, 417 Liberty st.
Squire, Francis F.,	125 Sumner ave.,	Vice-president, Fiberloid Co., Worcester st., I. O.
Stacy, Edwin C.,	74 Crystal ave.,	Ticket Agent, 7 North Main st.
Stadden, William H.,	178 Maple st.,	Clerk, 39 Stockbridge st.
Stansfield, Ellis,	182 Phoenix ter.,	Carpenter, Tucker & Lewis, West Springfield.
Stanton, Mark S.,	64 Jefferson ave.,	Superintendent, Cor. Walnut and Broadway, Chicopee Falls.
Starr, Albert C.,	130 Mulberry st.,	Special Agent, 295 Worthington st.
Starr, Bentley C.,	25 Mattoon st.,	Electrician, Cor. Dwight st. and Harrison ave.
Starrett, Francis J.,	103 Massachusetts ave.,	Merchant, 806–808 State st.
Stauffer, Daniel H.,	57 Governor st.,	Machinist, 63 Governor st.
Stauffer, Edward F.,	57 Governor st.,	Bookkeeper, 241 Main st.
Stearns, Edwin F.,	31 Maple st.,	Insurance Broker, 317 Main st.
Stearns, James P.,	52 High st.,	Auditor, 500 Main st.
Stearns, Herbert S.,	28 Oswego st.,	Insurance Specialist, 317 Main st.
Stebbins, Carlton E.,	27 Grenada ter.,	Foreman, 472 Union st.
Stebbins, Frederick H.,	28 James st.,	Shoe Clerk, 320 Main st.
Stebbins, Robert E.,	79 Rochelle st.,	Manager, 500 Main st.
Steere, Clarence M.,	34 King st.,	Telephone Worker, 116 Liberty st.
Steinbrunn, Harry E.,	3 Central st.,	Real Estate Dealer, 274 Main st.
Steinman, John,	50 Forest st.,	Merchant, 138 Dickinson st.
Stent, George R.,	275 Maple st.,	Chauffeur, 172 Long Hill st.
Stephen, Robert Valentine,	72 Maynard st.,	Plumber, 220 Dwight st.
Stephens, Ernest J.,	11 Chase ave.,	Contractor, 145 State st.
Sterns, Arthur C.,	21 Herman st.,	Salesman, 141 Chestnut st.
Sterns, Frank D.,	38 Crystal ave.,	Machinist, 7 North Main st.
Stevens, George W.,	32 Dunmoreland st.,	Steam Fitter, Foot Church st., West Springfield.
Stevens, Grenville M.,	72 Dartmouth st.,	Jeweler, 408 Main st.
Stevens, Lennie E.,	96 Washington st.,	Manager, 799 Main st.
Stevens, Ralph W.,	77 Clarendon st.,	Salesman, Firestone Co., New York, N. Y.
Stevens, Russell C.,	S. S. Boston road,	Auto Repairman, C. D. Farnsworth, West Springfield.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Stiles, Walter A.,	145 Dickinson st.,	Clerk, 195 State st.
Still, Warren A.,	10 Birnie ave.,	Machinist, 4 Birnie ave.
Stilmar, Louis H.,	18 Virginia st.,	Salesman, Institute of Business, New York, N. Y.
Stocks, Frederick D.,	27 Plymouth st.,	Plumber, 131 Main st.
St. Onge, H. Frank,	118 Belvidere st.,	Buyer, 346-348 Main st.
Stone, Charles A.,	176 Pearl st.,	Merchant, 55 Lyman st.
Storms, Frank F.,	50 Spruceland ave.,	Manufacturer, Cor. Page blvd. and Cottage st.
Stowell, Byron F.,	79 Dawes st.,	Mechanical Engineer, Unemployed.
Stratton, George L.,	92 Calhoun st.,	Wholesale Grocer, 97 Calhoun st.
Stricker, Fred E.,	162 Westminster st.,	Metallurgist, Meadow st., Chicopee Falls.
Strong, Earl D.,	23 Parkwood st.,	Assistant Foreman, 39 Stockbridge st.
Strong, Henry,	107 Westford ave.,	Contractor, Retired.
Sturtevant, Frank F.,	290 Bridge st.,	Clerk, Cor. Main and Taylor sts.
Sullivan, Cornelius,	61 Broad st.,	Caretaker, 135 Florest Glen Road, Longmeadow.
Sullivan, Daniel E.,	275 Main st., I. O.,	Chauffeur, 168 State st., Ludlow.
Sullivan, Daniel J.,	34 Douglas st.,	Foreman, Hampden Corundum Wheel Co., Fisk ave.
Sullivan, Frank D.,	75 Central st.,	Freight Foreman, N.Y.N.H.&.H.R.R Co.
Sullivan, James F.,	1032 State st.,	Soap Maker, Walker st.
Sullivan, James F.,	528 Union st.,	Assistant Manager, 375 Main st.
Sullivan, John M.,	57 Everett st.,	Manager, 224 Franklin st.
Sullivan, Michael W.,	764 Carew st.,	Motorman, 7 North Main st.
Sullivan, William,	292 Chestnut st.,	Brick Layer, Foot Church st., West Springfield.
Sullivan, William J.,	60 Ringgold st.,	Motorman, 7 North Main st.
Sullivan, William M.,	11 Horace st.,	Superintendent, International Insulating Co., Mechanic st.
Sullivan, William T.,	53 Winthrop st.,	Watchman, 33 Morris st.
Summers, George W.,	S. S. Bay st.,	General Insurance, 374 Main st.
Supernaut, Camill Amedee,	272 Centre st., I. O.,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Swaine, John W.,	33 Wareham st.,	Iron Worker, 30 Cypress st.
Swan, Lewis W.,	33 Grant st.,	Hardware Dealer, 262 Main st.
Swan, Willard F.,	72 Northampton ave.,	Tool Maker, 837 State st.
Swander, Edward O.,	193 Pine st.,	Dentist, 318 Main st.
Swanson, Elton A.,	122 Chestnut st.,	Manager, 481 Main st.
Swazey, Walter W., Jr.,	43 Sherman st.,	Dentist, 25 Harrison ave.
Sweeney, Eugene Joseph,	461 Armory st.,	Salesman, 152 Lyman st.
Sweeney, James Francis,	50 Broad st.,	Shipping Clerk, 112 Gardner st.
Swift, Charles H.,	93 High st.,	Carpenter, 93 High st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Swords, John A.,	Centre st., I. O.,	Sheet Metal Worker, Foot Church st., West Springfield.
Swords, John J.,	176 Eastern ave.,	Steam Fitter, 19 Worthington st.
Swords, Peter J.,	161 Hancock st.,	Steam Fitter, 161 Hancock st.
Taft, George F.,	444 Belmont ave.,	Salesman, 16 Sanford st.
Taft, Harry E.,	242 Orange st.,	Electrician, 242 Orange st.
Tait, Harry J.,	24 Chapin ter.,	Merchant, 134 Cass st.
Tait, James C.,	191 Springfield st.,	Merchant, 134 Cass st.
Talbot, Frank E.,	78 Lyndale st.,	Accountant, 293 Bridge st.
Talmadge, Leslie K.,	220 Pearl st.,	Office Manager, Superior place.
Tansey, Peter W.,	49 Prospect st.,	Clerk, 521 Main st.
Tarbell, Henry C.,	59 Hall st.,	Accountant, 168 Birnie ave.
Tate, William J.,	36 Massasoit st.,	Foreman, 49 Boylston st.
Tatro, Oscar E.,	48 Eleanor road,	Printer, Jacobs Print Co., Dickinson st.
Taylor, Albert C.,	708 Chestnut st.,	Office Manager, Spfd. Provision Co., Plainfield st.
Taylor, Albert W.,	12 Sheldon st.,	Druggist, 188 State st.,
Taylor, E. Boyden,	44 Revere st.,	Floor Manager, 390–396 Main st.
Taylor, Edwin E.,	34 Clark st.,	Filer, 65 Stockbridge st.
Taylor, Raymond H.,	61 Keith st.,	Salesman, 182 Walnut st.
Taylor, William J.,	130 Sherman ave.,	Inspector, Page blvd.
Terry, Charles E.,	31 Maple st.,	Merchant, West Springfield.
Terry, George H.,	N. S. Switzer ave.,	Printer, 93–95 Orleans st.
Terwilliger, James H.,	54 Hollywood st.,	Merchant, 402 Dickinson st.
Thalin, G. Harry,	122 Chestnut st.,	Resident Manager, 293 Bridge st.
Thayer, Charles H.,	146 Myrtle st., I. O.,	Salesman, 34 Hampden st.
Thomas, John J.,	62 Kensington ave.,	Lithographer, 67 Taylor st.
Thompson, Clayton A.,	83 Walnut st.,	Agent, 53 Wilbraham road.
Thompson, Herbert E.,	25 Palmer ave.,	Pattern Maker, Not Employed.
Thompson, Wilkerson S. W.,	66 Sorrento st.,	Office Manager, 336 Main st.
Thomson, William J.,	911 Armory st.,	Carpenter, 911 Armory st.
Thornton, Michael J.,	48 Lester st.,	Assistant Superintendent, Spfd. Provision Co., Plainfield st.
Todd, Hiram L.,	182 North Main st.,	Motorman, 5 North Main st.
Tomlinson, Edmund,	64 Colonial ave.,	Purchasing Agent, Cowan Truck Co., Canal st., Holyoke.
Toole, John J.,	43 Plymouth st.,	Contractor, for the city.
Toomey, James F.,	20 Cleveland st.,	Lithographer, Warwick ave.
Toomey, James J.,	23 Middlesex st.,	Foreman, 837 State st.
Toomey, Michael S.,	119 Hancock st.,	Plumber, 240 Main st.
Tower, Cullen B.,	70 Sorrento st.,	Foreman, 472 Union st.
Tower, William J.,	192 Union st.,	Clerk, Worthy Paper Co., Mittineague.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Towne, Willis L.,	10 Chestnut st.,	Photographer, 508 Main st.
Townsend, Henry C.,	53 Hall st.,	Salesman, 348 Main st.
Treadwell, Edward A.,	26 Dymond st.,	Chemist, 145 Chestnut st.
Tripp, Edwin P.,	12 Cortland st.,	Mechanical Engineer, 33 Lyman st.
Trombly, William,	57 Quebec st., I. O.,	Foreman, Chapman Valve Co., 203 Hampshire st., I. O.
Trudeau, George Homer,	53 High st.,	Buyer, 390–396 Main st.
Trudell, Joseph H.,	54 Saratoga st.,	Mason, Foot Church st., West Springfield
Truesdell, William E.,	63 Virginia st.,	Merchant, 33 Lyman st.
Tufts, Ernest D.,	53 Bancroft st.,	Insurance Agent, 145 State st.
Tufts, John B.,	40 High st.,	Manager, 29 Worthington st.
Tuohey, Thomas F.,	45 Dexter st.,	Electrical Contractor, 332 Dwight st.
Tuohy, James A.,	51 James st.,	Salesman, 55–63 Lyman st.
Turner, Clinton A.,	24 Keith st.,	Finisher, Front st., Chicopee Falls.
Twining, William L.,	58 Bliss st.,	Mechanic, 318 Chestnut st.
Twohey, James,	151 College st.,	Painter, Foot Church st., West Springfield.
Twomey, George H.,	443 North Main st.,	Clerk, 430 Main st.
Tyler, John K.,	15 Rupert st.,	Assistant Treasurer, 20 Oak st.
Uhl, Karl A.,	73 Sunapee st.,	Accountant, 236 Main st.
Underwood, James T.,	38 Denver st.,	Printer, 53 Hillman st.
Upton, G. Herbert,	49 Colonial ave.,	Machinist, 837 State st.
Urban, John,	795 Main st.,	Cabinet Maker, Not Employed.
Valentine, Frank S.,	62 Noel st.,	President, N. E. Masons' Supply Co., Albany st.
Valliere, Raoul,	346 Chestnut st.,	Laborer, opp. Center Depot, Chicopee.
Van Derwerken, William C.,	191 High st.,	Foreman, 870 State st.
Van Syckel, John S.,	29 Hancock st.,	Salesman, 111 5th ave., New York, N. Y.
Ventrice, Augustus A.,	348 Bay st.,	Merchant, 348 Bay st.
Vezina, Romeo,	21 Greenwich st.,	Barber, 383 Main st.
Vincelette, Godfrey David,	10 Hampden st., I. O.,	Clerk, 10 Hampden st., I. O.
Vincent, Albert J.,	29 Grenada ter.,	Barber, 307 Main st.
Vincent, Frank O.,	8 Lawndale st.,	Barber, Phoenix bldg.
Vining, Albert W.,	33 High st.,	Merchant, 179–181 State st.
Vining, Louis E.,	165 Pine st.,	Clerk, 195 State st.
Vining, Paul M.,	42 Forest st.,	Bond Salesman, 387 Main st.
Vining, Scott T.,	17 Longfellow ter.,	Clerk, Warehouse Point, Conn.
Vogel, Erhard F.,	566 Main st.,	Store Keeper, 544 Main st.
Vogel, Fred A.,	24 Amherst st.,	Production Manager, Stevens-Duryea Co., Willimansett.
Wade, Homer A.,	135 Florence st.,	Clerk, 500 Main st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Wagner, Harry H.,	11 Niagara st.,	Gun Fitter, 39 Stockbridge st.
Wait, William L.,	98 Calhoun st.,	Clerk, 500 Main st.
Wakem, Paul S.,	45 Birnie ave.,	Drop Forger, 156 Wason ave.
Walker, Arthur A.,	79 Central st.,	Automobile Helper, 222 Chestnut st.
Walker, George A.,	63 Central st.,	Painter, 79 Central st.
Walker, Harold B.,	666 Chicopee road,	Assembler, Stevens-Duryea Co., Willimansett.
Wall, Edwin O.,	748 State st.,	Salesman, 128 Sidney st., Cambridge.
Wallace, James Joseph,	15 Worcester st., I. O.,	Insurance Agent, Thorndike and Palmer.
Wallace, James L.,	162 Sumner ave.,	Manager, 11 Main st., Holyoke.
Walls, Charles H.,	63 Morris st.,	Carpenter, 89 Morris st.
Walsh, John J.,	171 Abbe ave.,	Machinist, Bosch Magneto Co., North Main st.
Walsh, John J.,	93½ Bond st.,	Brick Layer, for the city.
Walters, Albert L.,	44 Princeton st.,	Head Bookkeeper, 425 Main st.
Walters, William H.,	32 Pleasant st.,	Stock Keeper, Standard Oil Co., Albany st.
Ward, John F.,	522 Worthington st.,	Clerk, cor. Liberty and Main sts.
Ward, John Frank,	200 Eastern ave.,	Inspector, 7 North Main st.
Ward, Stephen H.,	10 Sumner ave.,	Clerk, Page blvd.
Ward, William P.,	266 King st.,	Electrician, 65 Taylor st.
Warner, C. Raymond,	62 Bristol st.,	Clerk, Bosch Magneto Co., North Main st.
Warner, Harold E.,	20 Glendell ter.,	Buyer, 345 Main st.
Warner, Harold M.,	49 Bryant st.,	Salesman, 53 Hillman st.
Warner, Hiram Leroy,	N. S. Stony Hill road,	Farmer, Stony Hill road.
Warnock, Alexander,	78 Beaumont st.,	Truckman, 35 Essex st.
Warnock, Alexander,	47 James st.,	Glazier, 31–41 Market st.
Washburn, Harry G.,	45 Cambridge st.,	Millwright, 48 Harrison ave.
Watson, Ernest J.,	983 Carew st.,	Machinist, Powers Paper Co., Birnie ave.
Watters, Harry J.,	38 Roseland st.,	Motorman, 7 North Main st.
Watts, Russell N.,	40 High st.,	Salesman, Cheney Bigelow Wire Wks., Warwick ave.
Weaver, Frank H.,	52 Orlando st.,	Salesman, 174 Lyman st.
Webb, Charles W.,	264 Pearl st.,	Collector, 385 Liberty st.
Webber, Edwin B.,	43 Main st.,	Moving Picture Operator, 192–194 Worthington st.
Webster, Albert George,	147 Euclid ave.,	Chief Accountant, 500 Main st.
Webster, Louie C.,	38 Bradford st.,	Yard Man, N.Y.N.H.&H.R.R.Co., Water st.
Welch, Laurence J.,	722 Union st.,	Foreman, Fiberloid Corp., Worcester st., I. O.
Wellington, William,	795 Main st.,	Foreman, 74 Park st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Wells, Charles E.,	33 Morningside Park,	Manager, 2 Park st.
Wells, George W.,	27 Groveland st.,	Laborer, 36 Court st.
Welsh, James E.,	138 Patton st.,	Hardwood Finisher, Warwick ave.
Welsh, William J.,	90 Morris st.,	Upholsterer, Not Employed.
Wetherell, Louis H.,	49 Alden st.,	Polisher, 39 Stockbridge st.
Whelan, Donald J.,	125 Allen st.,	Printer, 140 Wilbraham ave.
Whitaker, Cyrus A.,	27 Hebron st.,	Motorman, 7 North Main st.
White, Arthur E.,	59 King st.,	Electrician, 92 State st.
White, Charles T.,	697 Belmont ave.,	Civil Engineer, 17 Hampden st.
White, Ellison C.,	65 Spring st.,	Milk Man, 106 Oakland st.
White, George H.,	18 Norfolk st.,	Contractor, 735 Worthington st.
White, William,	419 Walnut st.,	Cigar Maker, 58 Tyler st.
Whitehouse, Lewis E.,	111 Massasoit st.,	Bookkeeper, 390–396 Main st.
Whitelock, Samuel F.,	83 Pearl st.,	Cigar Maker, 459 Worthington st.
Whiting, Freeman,	246 Mill st.,	Manager, 282 Main st.
Whitney, Mellen A.,	62 Fairfield st.,	Grocer, 325 Belmont ave.
Whittier, Theodore N.,	21 Lester st.,	Clerk, 367 Main st.
Widlansky, Lewis,	40 Hebron st.,	Proprietor, 624 North st.
Wiegand, Carl Anton,	258 Sumner ave.,	Manager, 30 Taylor st.
Wilcox, Leroy H.,	21 College st.,	Real Estate Dealer, 374 Main st.
Wilder, Charles C.,	137 Dartmouth ter.,	Retired.
Wilkinson, David,	140 Hampden st., I. O.,	Builder, Chapman Valve Co., 203 Hampshire st., I. O.
Willett, Frank L.,	42 Acushnet ave.,	Linotype Operator, 32 Cypress st.
Williams, George E.,	850 Chestnut st.,	Drop Forger, Not Employed.
Williams, J. Marion,	25 Green lane,	Secretary, 38 Walter st.
Williams, William H.,	144 Wilbraham road,	Traveling Salesman, Cyclops Steel Co., New York, N. Y.
Willis, George M.,	179 Wilbraham road,	Real Estate Dealer, 179 Wilbraham road.
Williston, William C.,	49 Dawes st.,	Brick Mason, Unemployed.
Wilson, George,	312 Armory st.,	Engraver, Chandler Co., Napier st.
Wilson, Harrison E.,	2 Gerrish court,	Auto Repairman, 61 Bliss st.
Winter, Dwight R.,	36 Buckingham st.,	Real Estate Broker, 3 Elm st.
Winters, Lawrence,	288 Armory st.,	Salesman, 435 Dwight st.
Winton, Alexander Forbes,	41 Embury st.,	Tool Inspector, Page blvd.
Wirth, Fred A.,	13 Gordon st.,	General Foreman, 324 Main st.
Wise, Arthur D.,	73 Oak st., I. O.,	Clerk, Fiberloid Co., Worcester st., I. O.
Witherell, George K.,	120 Main st.,	Insurance Agent, 120 Main st.
Wood, Charles A.,	20 Montmorenci st.,	Manager, 591 Main st.
Wood, Dwight B.,	14 Amaron st.,	Clerk, 195 State st.
Wood, Edward L.,	44 Riverview st.,	Manager, 21 Cypress st.
Wood, Leroy H.,	17 Pasadena st.,	Milk Peddler, 120 Oakland st.

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NAME.	RESIDENCE.	PLACE OF BUSINESS OR OCCUPATION.
Wood, Lorrin S.,	68 Temple st.,	Building Contractor, 12–14 Stockbridge st.
Woodard, Olney W.,	220 High st.,	Insurance Agent, 293 Bridge st.
Woodbury, Francis Bailey,	101 Ashley st.,	Janitor, Unitarian Church.
Woodbury, Milo K.,	672 Chestnut st.,	Grocer, 138–144 Main st.
Woodhead, William Henry,	66 Malden st.,	Photographer, 77 Worthington st.
Woods, Patrick F.,	542 Chestnut st.,	Linotype Operator, Holyoke Transcript Pub. Co., 180 High st., Holyoke.
Woodward, Elbert A.,	1047 State st.,	Estimator, 850 State st.
Woodward, Herbert A.,	30 Greenacre square,	Superintendent, 74 Park st.
Wright, William J.,	27 John st.,	Laborer, B. & M. R. R. Co.
Wrighter, Gordon,	117 Northampton ave.,	Manager, 196 Worthington st.
Wuterich, George W.,	34 Parkwood st.,	Manager, 364 Main st.
Wynne, William Joseph,	81 Prospect st.,	Steam Fitter, 20½ East Court st.
Yelinek, Louis J.,	72 Patton st.,	Cigar Maker, Railroad row.
Yiannacopoulos, George A.,	112 North Main st.,	Real Estate Agent, 10 Hampden st.
Young, Clyde W.,	31 Westminster st.,	President, 145 State st.
Young, Eugene A.,	363 Walnut st.,	Sawyer, Stearns Organ Works, Elm st., Westfield.
Young, George E.,	55 Dawes st.,	Tool Maker, 39 Stockbridge st.
Young, George W.,	5 Ruskin st.,	Foreman, 39 Stockbridge st.
Young, William,	715 State st.,	Druggist, 147 Main st.
Zoch, Alfred,	22 Brookline ave.,	Clerk, 282 Worthington st.

CITY OF SPRINGFIELD, June 6, 1921.

The foregoing is a list of jurors prepared for the City of Springfield under the provisions of law applicable thereto.

JOHN W. NOLAN,
WARREN P. UNDERWOOD,
STEPHEN F. BIBLE,
ELIJAH A. NEWELL,
Registrars of Voters.

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CITY AUDITOR

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THE CITY OF
SPRINGFIELD, MASSACHUSETTS.
AUDITING DEPARTMENT.

December 29, 1921.

To His Honor, the Mayor, and the City Council:—

During the fiscal year ended on November 30, 1921, this department has audited all bills and pay rolls presented for payment. It has also, as required by ordinance, made periodical examinations of the accounts of the City Treasurer, the City Clerk, the City Collector, and the Water Department, all of which have been found correct.

The accounts of the Treasurer for the Commissioners of the Sinking Funds have been examined by this department and found correct.

The regular financial statements, schedules, etc., are being prepared and will be presented later.

Respectfully submitted,

CLIFFORD E. COOK,
City Auditor.

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CONSOLIDATED BALANCE SHEET.
(After Closing.)
CITY OF SPRINGFIELD, MASS.
November 30, 1921.

	Totals.	FUNDS. General.	Water.	Capital.	Sinking.	Special and Trust.
ASSETS:						
Cash in Banks and Office of City Treasurer,	$895,725.88	*$213,483.30*	$47,268.82	$1,006,834.27	$43,926.32	$11,179.77
Revenues and Accounts Receivable (Schedule A),	2,576,648.74	2,501,050.54	75,598.20			
Property (Schedule B),	21,639,970.78		5,657,731.04	15,982,239.74		
Stores (Schedule C),	211,301.79	51,598.47	159,703.32			
Investments,	911,900.00				911,900.00	
Tax Titles (Schedule D),	64,724.98	64,724.98				
Total Assets,	$26,300,272.17	$2,403,890.69	$5,940,301.38	$16,989,074.01	$955,826.32	$11,179.77
LIABILITIES:						
Warrants Payable,	$165,526.51	$122,854.26	$12,494.02	$30,126.78		$51.45
Notes Payable,	600,000.00	600,000.00				
Bonded Indebtedness (Schedule E):						
City Bonds—Within Limit,	5,353,000.00			5,353,000.00		
City Bonds—Outside Limit,	3,726,000.00			3,726,000.00		
Public Utility Bonds,	1,637,000.00		1,637,000.00			
Total Bonds Outstanding,	$10,716,000.00		$1,637,000.00	$9,079,000.00		
Less Sinking Fund Reserves,	955,826.32		127,066.69	828,759.63		
Net Bonded Indebtedness	$9,760,173.68		$1,509,933.31	$8,250,240.37		

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CONSOLIDATED BALANCE SHEET.—Continued.

	Totals.	FUNDS. General.	Water.	Capital.	Sinking.	Special and Trust.
Reserves:						
For Redemption of Bonds,	$955,826.32		$127,066.69	$828,759.63		
For Abatement of Taxes,	64,027.37	$64,027.37				
For Abatement of Accounts Receivable,	17,146.25	16,768.26	377.99			
For Depreciation of Property,	260,138.37		260,138.37			
For Deferred Work,	34,774.80		34,774.80			
For Extraordinary and Unforeseen Expenses,	108,133.99	108,133.99				
Total Reserves,	$1,440,047.10	$188,929.62	$422,357.85	$828,759.63		
Sinking Funds,	$955,826.32				$955,826.32	
Special Funds:						
Gurdon Bill Fund,	$3,551.52					$3,551.52
Everett H. Barney Fund,	6,237.08					6,237.08
Charles S. Marsh Fund,	377.38					377.38
William H. Smith Fund,	743.15					743.15
Smith Hughes Fund,	219.19					219.19
Total Special Funds,	$11,128.32					$11,128.32
Total Liabilities,	$12,932,701.93	$911,783.88	$1,944,785.18	$9,109,126.78	$955,826.32	$11,179.77
EXCESS OF ASSETS:						
Surplus,	13,367,570.24	1,492,106.81	3,995,516.20	7,879,947.23		
	$26,300,272.17	$2,403,890.69	$5,940,301.38	$16,989,074.01	$955,826.32	$11,179.77

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CONSOLIDATED FUND STATEMENT.
(After Closing.)
CITY OF SPRINGFIELD, MASS.
November 30, 1921.

	Totals.	FUNDS.				
		General.	Water.	Capital.	Sinking.	Special and Trust.
RESOURCES:						
Unapplied Cash,	$730,199.37	$336,337.56	$34,774.80	$976,707.49	$43,926.32	$11,128.32
Available Resources,	2,576,648.74	2,501,050.54	75,598.20			
Investments,	911,900.00				911,900.00	
Tax Titles (Schedule D),	64,724.98	64,724.98				
Total Fund Resources,	$4,283,473.09	$2,229,437.96	$110,373.00	$976,707.49	$955,826.32	$11,128.32
APPROPRIATIONS AND RESERVES:						
Unencumbered Balances of Appropriations (Schedule F),	$1,046,455.49	$101,354.80		$945,100.69		
State Tax,	5,052.00	5,052.00				
Reserves:						
For Encumbrances of Appropriations (Schedule F),	$80,828.88	$79,258.04		$1,570.84		
For Notes Payable,	600,000.00	600,000.00				
For Abatement of Accounts Receivable,	17,146.25	16,768.26	$377.99			
For Dwight Street Betterments,	582,118.00	582,118.00				
For Deferred Work,	34,774.80		34,774.80			
For Abatement of Taxes,	64,027.37	64,027.37				
For Extraordinary and Unforeseen Expenses,	108,133.99	108,133.99				
For Re-appropriation,	30,035.96			30,035.96		
For Redemption of Public Debt,	955,826.32				$955,826.32	
Total Reserves,	$2,472,891.57	$1,450,305.66	$35,152.79	$31,606.80	$955,826.32	
Total Appropriations and Reserves,	$3,524,399.06	$1,556,712.46	$35,152.79	$976,707.49	$955,826.32	
EXCESS:						
Surplus (Schedule K),	759,074.03	672,725.50	75,220.21			$11,128.32
	$4,283,473.09	$2,229,437.96	$110,373.00	$976,707.49	$955,826.32	$11,128.32

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REVENUES AND ACCOUNTS RECEIVABLE.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Miscellaneous Revenues:							
Care at Almshouse—Charities Department:							
Cities and Towns,	$2,037.77	$2,498.21	$4,535.98	$4,492.63	$1.35	$4,493.98	$42.00
Commonwealth,	694.29	1,801.11	2,495.40	1,816.74	.....	1,816.74	678.66
Individuals,	492.08	5,901.23	6,393.31	5,337.22	117.93	5,455.15	938.16
Care at Hospital—Health Department,	8,110.76	18,919.52	27,030.28	10,019.86	7,859.37	17,879.23	9,151.05
Charges for Services—Engineering,	.....	26.47	26.47	26.47	.....	26.47	.....
Charges for Services—Street Sprinkling, Street Railway,	3,204.20	3,313.50	6,517.70	3,204.20	.....	3,204.20	3,313.50
Fees:							
Assessors, Board of,	.....	11.70	11.70	11.70	.....	11.70	.....
City Collector,	.....	7,255.17	7,255.17	7,101.64	153.53	7,255.17	.....
License Commissioners, Board of,	.....	134.00	134.00	134.00	.....	134.00	.....
Lock-up,	.....	209.35	209.35	164.30	.....	164.30	45.05
Public Bathhouses,	.....	1,170.20	1,170.20	1,170.20	.....	1,170.20	.....
Public Sanitary,	.....	1,520.94	1,520.94	1,420.54	.....	1,420.54	100.40
Interest:							
Bank Deposits—City Collector,	.....	1,870.19	1,870.19	1,870.19	.....	1,870.19	.....
Special Assessments,	.....	1,399.46	1,399.46	1,399.46	.....	1,399.46	.....
Taxes,	.....	42,901.20	42,901.20	40,802.66	2,098.54	42,901.20	.....
Licenses:							
Alcohol,	13.00	60.00	73.00	51.00	1.00	52.00	21.00
Auctioneer,	2.00	70.00	72.00	68.00	2.00	70.00	2.00
Bowling Alley,	.....	20.00	20.00	20.00	.....	20.00	.....
Common Victualer,	.....	270.00	270.00	270.00	.....	270.00	.....
Dance,	.....	764.00	764.00	763.00	1.00	764.00	.....
Dead Animal Removal,	.....	1.00	1.00	1.00	.....	1.00	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Licenses (Cont.):							
Elevator Operator,	$20.00	$210.00	$230.00	$219.00	.....	$219.00	$11.00
Exhibition,	.....	276.00	276.00	276.00	.....	276.00	.....
Express,	12.48	584.00	596.48	566.84	$17.16	584.00	12.48
Farmer,	.....	32.75	32.75	32.50	.25	32.75	.....
Fruit and Vegetable,	.....	2,775.00	2,775.00	2,725.00	25.00	2,750.00	25.00
Innholder,	.....	10.00	10.00	10.00	.....	10.00	.....
Intelligence Office,	.....	28.00	28.00	28.00	.....	28.00	.....
Junk and Second Hand Dealer,	2.00	128.00	130.00	126.00	4.00	130.00	.....
Lodging House,	.....	124.00	124.00	124.00	.....	124.00	.....
Manicure, Massage, etc.,	.....	12.00	12.00	11.00	.....	11.00	1.00
Miscellaneous,	.....	2.00	2.00	2.00	.....	2.00	.....
Motor Vehicle:							
Class 1—Agent,	5.00	300.00	305.00	305.00	.....	305.00	.....
Class 2—Used Car Dealer,	.....	300.00	300.00	280.00	20.00	300.00	.....
Class 3—Junk,	.....	50.00	50.00	45.00	.....	45.00	5.00
Jitney,	.....	3,000.00	3,000.00	2,900.00	100.00	3,000.00	.....
Jitney Operator,	2.00	47.00	49.00	44.00	5.00	49.00	.....
Non-Alcoholic Beverages,	.....	45.00	45.00	45.00	.....	45.00	.....
Pawnbroker,	.....	375.00	375.00	375.00	.....	375.00	.....
Pool and Billiard,	4.00	1,366.00	1,370.00	1,332.00	38.00	1,370.00	.....
Rag Gatherer,	11.52	329.76	341.28	318.18	15.38	333.56	7.72
Special Sunday,	.....	390.00	390.00	390.00	.....	390.00	.....
Street Musician,	.....	2.25	2.25	2.25	.....	2.25	.....
Sunday Theatre,	.....	7,748.00	7,748.00	7,748.00	.....	7,748.00	.....
Taxicab,	2.00	89.00	91.00	85.00	1.00	86.00	5.00
Theatre,	.....	1,330.85	1,330.85	1,330.85	.....	1,330.85	.....
Moving Picture Receipts, School Department,	348.90	931.80	1,280.70	1,280.70	.....	1,280.70	.....
Permits:							
Sewer Entrance,	.....	35,626.42	35,626.42	35,626.42	.....	35,626.42	.....
Sign,	7.00	326.00	333.00	289.00	27.00	316.00	17.00
Street Obstruction,	.....	4,903.46	4,903.46	4,903.46	.....	4,903.46	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Permits (Cont.):							
Street Opening,	$279.50	$649.50	$929.00	$778.00	.....	$778.00	$151.00
Rents:							
Miscellaneous,	866.33	2,498.80	3,365.13	2,928.83	$12.50	2,941.33	423.80
Public Buildings, Department of:							
Administration Building,	516.30	3,097.80	3,614.10	3,097.80	.....	3,097.80	516.30
Auditorium,	3,806.75	16,600.00	20,406.75	14,420.00	1,279.75	15,699.75	4,707.00
Municipal Organ,	15.00	525.00	540.00	495.00	15.00	510.00	30.00
School Halls,	10.00	399.00	409.00	343.00	48.00	391.00	18.00
Schoolhouse Property,	302.60	2,219.50	2,522.10	2,169.50	75.00	2,244.50	277.60
Public Parks, Department of,	.....	801.00	801.00	51.00	.....	51.00	750.00
Streets and Engineering, Department of:							
Dwight Street Widening,	674.19	.....	674.19	.....	.....	.....	674.19
Equipment,	5.00	528.50	533.50	204.00	237.50	441.50	92.00
Tuition:							
Central High School,	1,867.50	13,180.50	15,048.00	11,345.00	483.50	11,828.50	3,219.50
Evening School Elementary,	.....	24.98	24.98	24.98	.....	24.98	.....
Evening High Schools,	24.00	1,058.13	1,082.13	1,082.13	.....	1,082.13	.....
Evening School of Trades,	.....	2,967.00	2,967.00	2,967.00	.....	2,967.00	.....
Evening Vocational School,	.....	560.00	560.00	560.00	.....	560.00	.....
Graded Schools and Junior High,	1,568.35	11,910.85	13,479.20	9,917.85	382.20	10,300.05	3,179.15
High School of Commerce,	1,380.00	12,037.50	13,417.50	10,013.08	261.00	10,274.08	3,143.42
Technical High School,	3,071.00	20,634.50	23,705.50	17,875.00	770.12	18,645.12	5,060.38
Vocational School,	15.00	25,944.25	25,959.25	23,733.50	258.00	23,991.50	1,967.75
Miscellaneous Sales:							
Building Department,	.....	15.00	15.00	15.00	.....	15.00	.....
Charities Department — Almshouse,	.....	930.18	930.18	760.08	.....	760.08	170.10
Charities Department—Wood,	199.00	4,545.51	4,744.51	4,259.38	32.00	4,291.38	453.13
Fire Department,	.....	375.00	375.00	375.00	.....	375.00	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Miscellaneous Sales (Cont.):							
Health Department,	.....	$158.00	$158.00	$158.00	.....	$158.00	.....
Municipal Market,	.....	24.00	24.00	24.00	.....	24.00	.....
Police Department,	.....	1,637.61	1,637.61	1,612.61	.....	1,612.61	$25.00
Public Buildings, Department of:							
Sale of Buildings,	.....	1,210.00	1,210.00	1,210.00	.....	1,210.00	.....
Schoolhouses,	$65.27	90.88	156.15	44.68	.....	44.68	111.47
Public Parks, Department of:							
Everett H. Barney Fund,	.....	780.92	780.92	780.92	.....	780.92	.....
Miscellaneous,	106.50	187.72	294.22	294.22	.....	294.22	.....
Public Safety, Committee on,	.....	326.25	326.25	326.25	.....	326.25	.....
School Department:							
Graded Schools Lunches,	59.49	1,459.17	1,518.66	1,518.66	.....	1,518.66	.....
Miscellaneous,	.....	1,631.81	1,631.81	1,619.74	.....	1,619.74	12.07
Vocational School,	34.23	630.01	664.24	644.67	$19.57	664.24	.....
Sealer of Weights and Measures,	.....	250.00	250.00	250.00	.....	250.00	.....
Streets and Engineering, Department of:							
Garbage,	1,024.21	9,999.99	11,024.20	10,190.87	.....	10,190.87	833.33
Miscellaneous,	1,373.81	2,475.17	3,848.98	2,750.44	485.45	3,235.89	613.09
Recovered Expenditures:							
Charities, Department of:							
Cities and Towns,	2,651.13	3,809.50	6,460.63	4,964.89	3.30	4,968.19	1,492.44
Commonwealth,	9,853.31	16,739.62	26,592.93	24,529.63	32.50	24,562.13	2,030.80
Individuals,	156.90	925.28	1,082.18	347.78	.....	347.78	734.40
Fire Department,	9.00	1.58	10.58	1.58	9.00	10.58	.....
Health Department,	32.75	41.00	73.75	6.00	.....	6.00	67.75
License Commissioners, Board of,	.....	52.70	52.70	52.70	.....	52.70	.....
Public Buildings, Department of,	.....	370.50	370.50	350.95	.....	350.95	19.55
Public Parks, Department of,	.....	997.55	997.55	997.55	.....	997.55	.....
Public Safety, Committee on,	.....	5.93	5.93	5.93	.....	5.93	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Recovered Expenditures (Cont.):							
Streets and Engineering, Department of:							
Administration,	.....	$65.60	$65.60	$61.50	.....	$61.50	$4.10
Bridges,	$16.61	21,459.63	21,476.24	21,418.92	$16.61	21,435.53	40.71
Highways,	14,947.53	40,984.96	55,932.49	40,081.77	135.05	40,216.82	15,715.67
Refuse Disposal,	607.94	.....	607.94	.....	607.94	607.94	.....
Repair Shop,	16.54	170.00	186.54	126.26	25.08	151.34	35.20
Sewers,	505.36	1,940.64	2,446.00	2,237.24	.....	2,237.24	208.76
Sidewalks and Curbing,	615.31	3,386.32	4,001.63	3,211.26	19.57	3,230.83	770.80
Stables and Yards,	.....	121.69	121.69	70.69	.....	70.69	51.00
Street Cleaning,	291.72	70.02	361.74	70.02	.....	70.02	291.72
Street Oiling,	171.11	508.58	679.69	679.69	.....	679.69	.....
Special Assessments:							
Betterments:							
Dwight Street Widening,	471,463.75	.....	471,463.75	6,771.71	3,119.33	9,891.04	461,572.71
Street,	44,714.75	71,940.75	116,655.50	43,882.49	3,908.77	47,791.26	68,864.24
Interest—Apportioned Betterments,	10,736.23	12,954.97	23,691.20	810.14	438.13	1,248.27	22,442.93
Sidewalks and Curbing,	21,951.78	50,908.37	72,860.15	46,117.29	4,939.48	51,056.77	21,803.38
Street Watering and Oiling:							
1921,	.....	39,580.66	39,580.66	28,994.15	54.92	29,049.07	10,531.59
1920,	9,012.53	.....	9,012.53	8,946.67	65.86	9,012.53	.....
1919,	11.44	.....	11.44	9.85	1.59	11.44	.....
1918,	16.27*	.....	16.27*	.....	16.27*	16.27*	.....
Tax Titles,	.....	2,928.63	2,928.63	2,928.63	.....	2,928.63	.....
Taxes—1921,	.....	6,461,862.16	6,461,862.16	4,620,341.93	53,704.38	4,674,046.31	1,787,815.85
1920,	1,435,321.45	5,056.32	1,440,377.77	1,389,832.97	49,717.39	1,439,550.36	827.41
1919,	6,494.90	.....	6,494.90	2,635.22	3,859.68	6,494.90	.....
1918,	22.38	.....	22.38	3.88	18.50	22.38	.....
Total General Fund, ...	$2,061,821.18	$7,030,706.53	$9,092,527.71	$6,520,894.49	$135,507.91	$6,656,402.40	$2,436,125.31

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Miscellaneous Sales (Cont.):							
Health Department,	.....	$158.00	$158.00	$158.00	.....	$158.00	.....
Municipal Market,	.....	24.00	24.00	24.00	.....	24.00	.....
Police Department,	.....	1,637.61	1,637.61	1,612.61	.....	1,612.61	$25.00
Public Buildings, Department of:							
Sale of Buildings,	.....	1,210.00	1,210.00	1,210.00	.....	1,210.00	.....
Schoolhouses,	$65.27	90.88	156.15	44.68	.....	44.68	111.47
Public Parks, Department of:							
Everett H. Barney Fund,	.....	780.92	780.92	780.92	.....	780.92	.....
Miscellaneous,	106.50	187.72	294.22	294.22	.....	294.22	.....
Public Safety, Committee on,	.....	326.25	326.25	326.25	.....	326.25	.....
School Department:							
Graded Schools Lunches,	59.49	1,459.17	1,518.66	1,518.66	.....	1,518.66	.....
Miscellaneous,	.....	1,631.81	1,631.81	1,619.74	.....	1,619.74	12.07
Vocational School,	34.23	630.01	664.24	644.67	$19.57	664.24	.....
Sealer of Weights and Measures,	.....	250.00	250.00	250.00	.....	250.00	.....
Streets and Engineering, Department of:							
Garbage,	1,024.21	9,999.99	11,024.20	10,190.87	.....	10,190.87	833.33
Miscellaneous,	1,373.81	2,475.17	3,848.98	2,750.44	485.45	3,235.89	613.09
Recovered Expenditures:							
Charities, Department of:							
Cities and Towns,	2,651.13	3,809.50	6,460.63	4,964.89	3.30	4,968.19	1,492.44
Commonwealth,	9,853.31	16,739.62	26,592.93	24,529.63	32.50	24,562.13	2,030.80
Individuals,	156.90	925.28	1,082.18	347.78	.....	347.78	734.40
Fire Department,	9.00	1.58	10.58	1.58	9.00	10.58	.....
Health Department,	32.75	41.00	73.75	6.00	.....	6.00	67.75
License Commissioners, Board of,	.....	52.70	52.70	52.70	.....	52.70	.....
Public Buildings, Department of,	.....	370.50	370.50	350.95	.....	350.95	19.55
Public Parks, Department of,	.....	997.55	997.55	997.55	.....	997.55	.....
Public Safety, Committee on,	.....	5.93	5.93	5.93	.....	5.93	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
GENERAL FUND.							
Recovered Expenditures (Cont.):							
Streets and Engineering, Department of:							
Administration,	.....	$65.60	$65.60	$61.50	.....	$61.50	$4.10
Bridges,	$16.61	21,459.63	21,476.24	21,418.92	$16.61	21,435.53	40.71
Highways,	14,947.53	40,984.96	55,932.49	40,081.77	135.05	40,216.82	15,715.67
Refuse Disposal,	607.94	.....	607.94	.....	607.94	607.94	.....
Repair Shop,	16.54	170.00	186.54	126.26	25.08	151.34	35.20
Sewers,	505.36	1,940.64	2,446.00	2,237.24	.....	2,237.24	208.76
Sidewalks and Curbing,	615.31	3,386.32	4,001.63	3,211.26	19.57	3,230.83	770.80
Stables and Yards,	.....	121.69	121.69	70.69	.....	70.69	51.00
Street Cleaning,	291.72	70.02	361.74	70.02	.....	70.02	291.72
Street Oiling,	171.11	508.58	679.69	679.69	.....	679.69	.....
Special Assessments:							
Betterments:							
Dwight Street Widening,	471,463.75	.....	471,463.75	6,771.71	3,119.33	9,891.04	461,572.71
Street,	44,714.75	71,940.75	116,655.50	43,882.49	3,908.77	47,791.26	68,864.24
Interest—Apportioned Betterments,	10,736.23	12,954.97	23,691.20	810.14	438.13	1,248.27	22,442.93
Sidewalks and Curbing,	21,951.78	50,908.37	72,860.15	46,117.29	4,939.48	51,056.77	21,803.38
Street Watering and Oiling:							
1921,	.....	39,580.66	39,580.66	28,994.15	54.92	29,049.07	10,531.59
1920,	9,012.53	.....	9,012.53	8,946.67	65.86	9,012.53	.....
1919,	11.44	.....	11.44	9.85	1.59	11.44	.....
1918,	16.27*	.....	16.27*	.....	16.27*	16.27*	.....
Tax Titles,	.....	2,928.63	2,928.63	2,928.63	.....	2,928.63	.....
Taxes—1921,	.....	6,461,862.16	6,461,862.16	4,620,341.98	53,704.38	4,674,046.31	1,787,815.85
1920,	1,435,321.45	5,056.32	1,440,377.77	1,389,832.97	49,717.39	1,439,550.36	827.41
1919,	6,494.90	.....	6,494.90	2,635.22	3,859.68	6,494.90	.....
1918,	22.38	.....	22.38	3.88	18.50	22.38	.....
Total General Fund, ...	$2,061,821.18	$7,030,706.53	$9,092,527.71	$6,520,894.49	$135,507.91	$6,656,402.40	$2,436,125.31

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY COLLECTOR IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account	DEBIT			CREDIT			DEBIT
	Uncollected Nov. 30, 1920	Committed during the year	Total	Payments to City Treasurer	Abatements, etc.	Total	Uncollected Nov. 30, 1921
WATER FUND.							
Water Department:							
Miscellaneous Sales,	$19,777.00	$77,082.22	$96,859.22	$81,542.11	$933.74	$82,475.85	$14,383.37
Water Rates,	57,413.17	479,763.80	537,176.97	474,946.02	1,016.12	475,962.14	61,214.83
Total Water Fund,	$77,190.17	$556,846.02	$634,036.19	$556,488.13	$1,949.86	$558,437.99	$75,598.20
Total—City Collector,	$2,139,011.35	$7,587,552.55	$9,726,563.90	$7,077,382.62	$137,457.77	$7,214,840.39	$2,511,723.51

* Overcollection, 1920.

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY TREASURER IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account.	DEBIT.			CREDIT.			DEBIT.
	Uncollected Nov. 30, 1920.	Committed during the year.	Total.	Collected during the year.	Abatements, etc.	Total.	Uncollected Nov. 30, 1921.
GENERAL FUND.							
Miscellaneous Revenues:							
Commissioners of the Sinking Funds,	.....	$125,000.00	$125,000.00	$125,000.00	.....	$125,000.00	.....
Dog Tax,	.....	5,736.57	5,736.57	5,736.57	.....	5,736.57	.....
Fees:							
City Clerk,	.....	5,539.35	5,539.35	5,539.35	.....	5,539.35	.....
License Commissioners, Board of,	.....	336.00	336.00	336.00	.....	336.00	.....
Sealer of Weights and Measures,	$22.48	1,076.56	1,099.04	1,099.04	.....	1,099.04	.....
Fines:							
House of Correction,	.....	2,083.50	2,083.50	2,083.50	.....	2,083.50	.....
Police Court,	.....	17,248.74	17,248.74	17,248.74	.....	17,248.74	.....
Interest:							
Accrued on Bonds,	.....	281.95	281.95	281.95	.....	281.95	.....
City Clerk,	.....	70.16	70.16	70.16	.....	70.16	.....
City Treasurer,	.....	12,565.44	12,565.44	12,565.44	.....	12,565.44	.....
Licenses:							
Common Victualer,	.....	550.00	550.00	550.00	.....	550.00	.....
Hawker and Peddler,	.....	525.00	525.00	525.00	.....	525.00	.....
Innholder,	.....	55.00	55.00	55.00	.....	55.00	.....
Liquor,	.....	26.00	26.00	26.00	.....	26.00	.....
Milk,	.....	525.50	525.50	525.50	.....	525.50	.....
Sunday Sales,	.....	945.00	945.00	945.00	.....	945.00	.....
Loans in Anticipation of Taxes,	.....	4,800,000.00	4,800,000.00	4,800,000.00	.....	4,800,000.00	.....
Permits:							
Marriage,	.....	1,276.00	1,276.00	1,276.00	.....	1,276.00	.....
Premium on Bonds,	.....	17,978.50	17,978.50	17,978.50	.....	17,978.50	.....
Public Safety, Committee on,	.....	19.32	19.32	19.32	.....	19.32	.....
Reimbursement by Commonwealth:							
Corporation Tax,	273,772.38	317,716.76	591,489.14	575,711.72	$15,777.42	591,489.14	.....
Income Tax,	.....	613,672.26	613,672.26	571,729.38	.....	571,729.38	$41,942.88
National Bank Tax,	.....	8,067.89	8,067.89	8,067.89	.....	8,067.89	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY TREASURER IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account.	DEBIT.			CREDIT.			DEBIT.
	Uncollected Nov. 30, 1920.	Committed during the year.	Total.	Collected during the year.	Abatements, etc.	Total.	Uncollected Nov. 30, 1921.
GENERAL FUND.							
Miscellaneous Revenues (Cont.):							
Reimbursement by Commonwealth (Cont.):							
Soldiers' Relief:							
Military Aid,	.....	$375.00	$375.00	$375.00	.....	$375.00	.....
Soldiers' and Sailors' Burials,	.....	477.63	477.63	477.63	.....	477.63	.....
State Aid,	.....	90.10	90.10	90.10	.....	90.10	.....
Telephone Receipts, Commission on,	.....	193.05	193.05	193.05	.....	193.05	.....
Miscellaneous Sales:							
Assessors, Board of,	.....	65.00	65.00	65.00	.....	65.00	.....
Charities, Department of,	.....	29.50	29.50	29.50	.....	29.50	.....
City Collector,	.....	30.00	30.00	30.00	.....	30.00	.....
City Realty Committee,	.....	50.00	50.00	50.00	.....	50.00	.....
Fire Department,	$400.00	43.50	443.50	443.50	.....	443.50	.....
Law Department,	.....	30.00	30.00	30.00	.....	30.00	.....
Mayor,	32.50	.....	32.50	32.50	.....	32.50	.....
Police Department,	.....	47.20	47.20	47.20	.....	47.20	.....
Public Buildings, Department of—Schoolhouses,	.....	1.00	1.00	1.00	.....	1.00	.....
Public Parks, Department of,	.....	3,305.00	3,305.00	3,305.00	.....	3,305.00	.....
Public Works, Department of,	.....	25.00	25.00	25.00	.....	25.00	.....
School Department:							
High Schools Lunch,	.....	47,831.51	47,831.51	47,831.51	.....	47,831.51	.....
Sundry,	190.00	55.00	245.00	190.00	.....	190.00	$55.00
Sealer of Weights and Measures,	.....	9.00	9.00	.....	.....	.....	9.00
Streets and Engineering, Department of,	87.50	4,741.90	4,829.40	4,821.22	.....	4,821.22	8.18
Treasury Department,	.....	66.25	66.25	66.25	.....	66.25	.....
Recovered Expenditures:							
From Commonwealth — Civilian War Poll Tax,	.....	4,914.00	4,914.00	4,914.00	.....	4,914.00	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Continued.

(Schedule A.)

CITY TREASURER IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account.	DEBIT.			CREDIT.			DEBIT.
	Uncollected Nov 30, 1920.	Committed during the year.	Total.	Collected during the year.	Abatements, etc.	Total.	Uncollected Nov. 30, 1921.
GENERAL FUND.							
Recovered Expenditures (Cont.):							
Refunds:							
Petty Cash,	.....	$7,525.00	$7,525.00	$7,525.00	.....	$7,525.00	.....
Prior Year,	$8.20	808.36	816.56	816.56	.....	816.56	.....
Sundry,	194.63	10,773.71	10,968.34	10,929.76	.....	10,929.76	$38.58
Transfers from Capital Fund,	.....	278,616.18	278,616.18	255,744.59	.....	255,744.59	22,871.59
School Department:							
From Commonwealth:							
Americanization Work,	.....	5,945.99	5,945.99	5,945.99	.....	5,945.99	.....
Vocational School,	.....	12,748.73	12,748.73	12,748.73	.....	12,748.73	.....
Total General Fund,	$274,707.69	$6,310,093.11	$6,584,800.80	$6,504,098.15	$15,777.42	$6,519,875.57	$64,925.23
CAPITAL FUND.							
Miscellaneous Revenues:							
Transfers from General Fund:							
State Street Junior High School,	.....	$10,000.00	$10,000.00	$10,000.00	.....	$10,000.00	.....
Vocational School,	.....	16,168.76	16,168.76	16,168.76	.....	16,168.76	.....
Miscellaneous Sales:							
Sale of Land:							
Dwight Street,	.....	37,900.00	37,900.00	37,900.00	.....	37,900.00	.....
Fulton Street,	.....	4,382.54	4,382.54	4,382.54	.....	4,382.54	.....
Mill Street,	.....	3,000.00	3,000.00	3,000.00	.....	3,000.00	.....
Switzer Avenue,	.....	250.00	250.00	250.00	.....	250.00	.....
Vernon Street,	.....	191.25	191.25	191.25	.....	191.25	.....
Sale of Bonds,	.....	1,275,000.00	1,275,000.00	1,275,000.00	.....	1,275,000.00	.....
Total Capital Fund,	.....	$1,346,892.55	$1,346,892.55	$1,346,892.55	.....	$1,346,892.55	.....

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REVENUES AND ACCOUNTS RECEIVABLE.—Concluded.

(Schedule A.)

CITY TREASURER IN ACCOUNT WITH THE CITY OF SPRINGFIELD, MASS.

Account.	DEBIT.			CREDIT.			DEBIT.
	Uncollected Nov. 30, 1920.	Committed during the year.	Total.	Collected during the year.	Abatements, etc.	Total.	Uncollected Nov. 30, 1921.
WATER FUND.							
Recovered Expenditures:							
Refunds:							
Petty Cash,.....	.....	$250.00	$250.00	$250.00	.....	$250.00	.....
Sundry,.....	.....	211.35	211.35	211.35	.....	211.35	.....
Reimbursement for Special Work Done for Department of Streets and Engineering,..	$2,890.32	.....	2,890.32	2,890.32	.....	2,890.32	.....
Total Water Fund,.....	$2,890.32	$461.35	$3,351.67	$3,351.67	.....	$3,351.67	.....
SPECIAL AND TRUST FUND.							
Miscellaneous Revenues:							
Everett H. Barney Fund,.....	.....	$10,000.00	$10,000.00	$10,000.00	.....	$10,000.00	.....
Interest—Sundry Trust Funds, .	$182.39	179.69	362.08	362.08	.....	362.08	.....
Reimbursement from Commonwealth:							
Smith-Hughes Fund,.....	.....	2,046.34	2,046.34	2,046.34	.....	2,046.34	.....
Total Special and Trust Fund,.....	$182.39	$12,226.03	$12,408.42	$12,408.42	.....	$12,408.42	.....
Total—City Treasurer,.	$277,780.40	$7,669,673.04	$7,947,453.44	$7,866,750.79	$15,777.42	$7,882,528.21	$64,925.23
Total Revenues Receivable,.....	.....	.....	.....	.....	.....	.....	$2,576,648.74

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PROPERTY.

(Schedule B.)

CAPITAL FUND.

ASSESSORS, BOARD OF.			
Equipment.			
Office,			$11,527.68
BUILDING COMMISSIONER.			
Equipment.			
Automobile,		$2,046.08	
Miscellaneous,		20.00	
Office,		763.18	
			2,829.26
CHARITIES, DEPARTMENT OF.			
Buildings.			
Almshouse,	$28,605.39		
Wayfarers' Lodge,	25,848.57		
		$54,453.96	
Equipment.			
Automobile,	$1,098.57		
Furniture and Furnishings.			
Almshouse, $10,080.19			
Wayfarers' Lodge, 409.05			
	10,489.24		
Live Stock,	2,863.00		
Miscellaneous,	235.75		
Office,	257.52		
		14,944.08	
Land.			
Almshouse Farm,		75,000.00	
			144,398.04*
CITY AUDITOR.			
Equipment.			
Office,			2,416.74
CITY CLERK.			
Equipment.			
Office,			1,120.35
CITY COLLECTOR.			
Equipment.			
Office,			5,660.56
CITY PLANNING BOARD.			
Equipment.			
Office,			50.00
CITY TREASURER.			
Equipment.			
Office,			928.00
Forward,			$168,930.63

*Inventory Incomplete.

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Forward,.....			$168,930.63
Elections.			
Equipment.			
Furniture and Furnishings,.....		$2,706.00	
Office,.....		271.55	
			2,977.55
Fire Department.			
Buildings.			
Armory Street Station,.....	$47,747.00		
Chestnut Street Station,.....	14,500.00		
Headquarters, Court Street,.....	101,620.00		
Margaret Street Station,.....	22,500.00		
Mill Street Station,.....	36,381.83		
North and Patton Street Station,.....	58,000.00		
North Main Street Station,.....	20,000.00		
Oak Street, I. O., Station,.....	41,270.26		
Oakland Street Station,.....	12,140.11		
Pine Street Station,.....	35,000.00		
Plainfield Street Station,.....	10,500.00		
Walnut Street Station,.....	32,572.00		
Winchester Park Station,.....	50,000.00		
		$482,231.20	
Equipment.			
Operating.			
Fire Alarm System,.....	$124,528.00		
Fire Fighting,.....	286,471.88		
Furniture and Furnishings,.....	289.90*		
Miscellaneous,.....	1,866.43		
Office,.....	800.11		
		413,956.32	
Land.			
Armory Street Station,.....	$2,000.00		
Chestnut Street Station,.....	22,500.00		
Margaret Street Station,.....	2,600.00		
Mill Street Station,.....	8,000.00		
Mill River Lane Station,.....	500.00		
North Street Station,.....	14,000.00		
North Main Street Station,.....	30,800.00		
Oak Street, I. O., Station,.....	2,000.00		
Oakland Street Station,.....	3,500.00		
Pine Street Station,.....	4,000.00		
Plainfield Street Station,.....	2,000.00		
Walnut Street Station,.....	7,100.00		
Winchester Park Station,.....	7,000.00		
		106,000.00	
			1,002,187.53*
Health Department.			
Buildings.			
Hospital,.....		$40,000.00	
Forward,.....		$40,000.00	$1,174,095.70

*Inventory Incomplete.

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Forward,.....		$40,000.00	$1,174,095.70
HEALTH DEPARTMENT (Cont.).			
Equipment.			
Automobile,.....	$3,985.00		
Furniture and Furnishings,.....	4,606.36		
Office,.....	534.98		
Operating,.....	1,166.43		
		10,292.77	
Land.			
State Street, north side,.....	$11,000.00		
West Street, south side,.....	53,800.00		
		64,800.00	
			115,092.77
LAW DEPARTMENT.			
Equipment.			
Library,.....		$2,617.28	
Office,.....		136.46	
			2,753.74
MAYOR.			
Equipment.			
Automobile,.....		$5,809.00	
Office,.....		337.08	
			6,146.08
MISCELLANEOUS.			
Land.			
For Municipal Purposes—Longhill Street,.....		$10,000.00	
For School Site, between Windmere and Ardmore Streets,.....		2,767.96	
Police and Fire Headquarters and Heating Plant,.....		189,400.00	
			202,167.96
POLICE DEPARTMENT.			
Buildings.			
Police Headquarters,.....	$116,292.32		
Police Station, Indian Orchard,.....	3,000.00		
		$119,292.32	
Equipment.			
Automobiles,.....	$16,883.40		
Furniture and Furnishings,.....	4,244.52		
Miscellaneous,.....	9,948.01		
Motorcycles,.....	1,575.00		
Signal System,.....	15,000.00		
		47,650.93	
Land.			
Police Station, Indian Orchard,.....		300.00	
			167,243.25
PRINTING, COMMITTEE ON:			
Equipment.			
Office,.....			498.50
Forward,.....			$1,667,998.00

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Forward,			$1,667,998.00
PUBLIC BUILDINGS, DEPARTMENT OF.			
Administration.			
Equipment.			
Automobiles,		$1,150.00	
Miscellaneous,		676.35	
Office,		531.50	
			$2,357.85
Militia Rifle Range.			
Building.			
House,		$3,000.00	
Equipment.			
Miscellaneous,		7.00	
Underground Telephone System,		1,262.44	
Land.			
Robbins' Road Rifle Range,		1,000.00	
			5,269.44
Municipal Group Buildings.			
Buildings.			
Administration Building,		$552,072.94	
Auditorium,		390,500.00	
Court,		31,500.00	
Landscape Gardening,		9,600.00	
Campanile,		142,200.00	
			1,125,872.94
Equipment.			
Administration Building.			
Electrical Fixtures,	$20,300.00		
Furniture and Furnishings,	102,034.69		
Heating, Lighting, Plumbing, Elevator, etc.,	80,997.53		
		$203,332.22	
Auditorium.			
Electrical Fixtures,	$27,000.00		
Furniture and Furnishings,	43,215.00		
Heating, Lighting, Plumbing, Elevator, etc.,	68,445.00		
		138,660.00	
Campanile.			
Clock and Chimes,	$8,576.00		
Electrical Fixtures,	5,500.00		
Heating, Lighting, Plumbing, Elevator, etc.,	24,461.00		
		38,537.00	
Court.			
Electrical Fixtures,	$16,400.00		
Lighting and Plumbing,	2,200.00		
		18,600.00	
			394,129.22
Land.			
Court and Pynchon Streets,			1,200,077.44
Municipal Heating Plant.			
Building,		$31,670.00	
Equipment,		1,313.89	
			32,983.89
Public Sanitary.			
Building,			24,000.00
			2,784,690.78
Forward,			$4,452,688.78

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Forward,.....			$4,452,688.78
PUBLIC PARKS, DEPARTMENT OF.			
Buildings.			
East Springfield Park,.....	$3,368.00		
Emerson Wight Playground,.....	950.00		
Emily Bill Playground,.....	1,200.00		
Forest Park.			
Greenhouses,.....	4,000.00		
Menagerie,.....	20,000.00		
Middle Pavilion,.....	4,500.00		
Pheasantry, etc.,.....	1,500.00		
Restaurant,.....	4,000.00		
Sheds,.....	3,500.00		
Shelters,.....	1,000.00		
Shops,.....	3,500.00		
Stables,.....	12,500.00		
Sumner Avenue Pavilion,.....	3,500.00		
Loon Pond Bath House,.....	300.00		
Myrtle Street Playgrounds,.....	350.00		
Van Horn,.....	4,000.00		
Watershops Pond Bath House,.....	4,800.00		
West Street Playground,.....	250.00		
		$73,218.00	
Equipment.			
Automobiles,.....	$8,460.35		
Forestry Division,.....	1,859.54		
Horses,.....	850.00		
Miscellaneous,.....	5,380.29		
Steam Roller,.....	3,074.12		
		19,624.30	
Land.			
Alvord Circle,.....	$1,000.00		
Armory Street Reservoir Park,.....	9,390.33		
Armory Street Triangle,.....	400.00		
Bartlett Triangle,.....	500.00		
Belmont Triangle,.....	600.00		
Belmont Avenue,.....	2,000.00		
Benton Lawn,.....	18,000.00		
Bircham Park,.....	500.00		
Brickyard,.....	15,000.00		
Calhoun Square,.....	35,000.00		
Carew Triangle,.....	12,100.63		
Chapin Terrace,.....	3,000.00		
Clarendon Fountain,.....	864.22		
Concord Terrace,.....	1,000.00		
Cottage Hill Grove, I. O.,.....	12,000.00		
Court Square Extension,.....	1,400,400.00		
Crescent Terrace,.....	2,000.00		
Dartmouth Fountain,.....	1,127.71		
Dartmouth Terrace,.....	2,045.24		
Dorchester Rest,.....	1,054.68		
East Springfield Park,.....	3,000.00		
Emerson Wight Playground,.....	40,000.00		
Forward,.....	$1,560,982.81	$92,842.30	$4,452,688.78

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Forward,	$1,560,982.81	$92,842.30	$4,452,688.78
PUBLIC PARKS, DEPARTMENT OF (Cont.).			
Land (Cont.).			
Emily Bill Playground,	40,000.00		
Five Mile Pond,	10,500.00		
Florentine Gardens,	2,000.00		
Forest Park,	1,527,400.00		
Garfield Triangle,	1,300.00		
Gerrish Park,	8,000.00		
Glendell Terrace,	1,500.00		
Grenada Terrace,	2,000.00		
Gunn Square,	5,000.00		
Gurdon Bill Estate,	30,516.22		
Kenwood Park,	2,000.00		
Kenwood Terrace,	2,000.00		
Kibbe Fountain,	1,200.00		
Lafayette Rest,	1,000.00		
Liberty Street Triangle,	3,000.00		
Magnolia Terrace,	5,000.00		
Maple Street Triangle,	500.00		
Maplewood Terrace,	5,000.00		
Marengo Park,	4,000.00		
Massachusetts Terrace,	1,500.00		
McKnight Glen,	5,000.00		
McKnight Triangle,	3,000.00		
Merrick Terrace,	100,000.00		
Mill Street Fountain,	800.00		
Mill River Rest,	1,000.00		
Morningside Park,	800.00		
Oak Grove Park,	1,000.00		
Rio Vista,	500.00		
Rittenhouse Terrace,	2,000.00		
Sackett Park,	200.00		
Sargeant's Rest,	15,000.00		
Shea, Mary A., Park,	8,000.00		
Smith's Triangle,	5,000.00		
Springfield Street Triangle,	1,000.00		
Stearns Square,	200,000.00		
Stratford Terrace,	2,000.00		
Sumner Terrace,	7,000.00		
Tapley Playground,	7,000.00		
The Levee,	16,300.00		
Trinity Terrace,	2,500.00		
Thompson Triangle,	7,000.00		
Van Horn Reservoir Park,	52,000.00		
Watershops Triangle,	1,000.00		
Westford Circle,	2,000.00		
West Street,	50,000.00		
West Street Triangle,	500.00		
Winchester Square,	25,000.00		
		3,729,999.08	
			3,822,841.33
PUBLIC WORKS, BOARD OF.			
Equipment.			
Office,			50.00
Forward,			$8,275,580.11

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Forward,.....		$8,275,580.11
SCHOOL DEPARTMENT.		
Buildings.		
Acushnet Avenue,.....	$48,608.15	
Alden Street,.....	15,077.64	
Armory Street,.....	148,567.08	
Barrows,.....	44,939.59	
Boston Road,.....	12,868.94	
Brightwood,.....	162,735.54	
Buckingham,.....	168,821.19	
Carew Street,.....	47,188.82	
Carlisle,.....	200.00	
Central High, ...	854,481.63	
Central Street,.....	79,714.46	
374 Central Street,.....	1,112.59	
Charles Street,.....	14,859.09	
Chestnut Street,.....	425,961.88	
Dry Bridge,.....	1,578.49	
Eastern Avenue,.....	30,580.92	
East Springfield,.....	662.54	
East Union Street,.....	25,024.33	
Emery Street Shop and Storehouse,.....	48,481.87	
Five Mile Pond,.....	4,007.62	
Forest Park,.....	435,190.21	
Glenwood,.....	16,548.45	
High School of Commerce,.....	737,784.43	
Homer Street,.....	176,534.60	
Hooker (Old),.....	87,023.35	
Hooker (New),.....	269,869.61	
Howard Street,.....	199,513.93	
Indian Orchard Grammar,.....	186,549.16	
Indian Orchard Primary,.....	12,853.48	
Jefferson Avenue,.....	42,047.98	
Junior High,.....	12,121.71	
Kensington Avenue,.....	98,589.07	
Liberty,.....	77,513.01	
Lincoln,.....	91,931.06	
Portable Schoolhouses.		
Boston Road,.....	1,525.00	
Buckingham,.....	4,225.00	
Dry Bridge,.....	1,550.00	
Indian Orchard Primary,.....	3,546.96	
Rushville,.....	4,175.94	
Pynchon Street,.....	68,068.02	
School Street,.....	20,338.57	
Sixteen Acres,.....	2,637.11	
Strickland,.....	21,727.78	
Sumner Avenue,.....	60,325.10	
Tapley,.....	70,888.04	
Technical High,.....	287,812.59	
Vocational,.....	274,133.55	
Wachogue,.....	800.00	
Washington,.....	136,876.24	
White Street,.....	49,966.41	
Forward,.....	$5,088,138.73	$8,275,580.11

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Forward,	$5,088,138.73		$8,275,580.11
SCHOOL DEPARTMENT (Cont.).			
Buildings (Cont.).			
Wight House, Indian Orchard,	608.76		
William Street,	58,913.75		
Worthington Street,	68,304.91		
		$5,215,966.15	
Equipment.			
Operating.			
Furniture and Furnishings,	$203,116.39		
Miscellaneous,	53,761.20		
		256,877.59	
Land.			
Acushnet Avenue,	$16,000.00		
Alden Street,	3,800.00		
Armory Street,	8,500.00		
Barrows,	18,700.00		
Berkshire Avenue,	3,981.78		
Boston Road,	1,500.00		
Brightwood,	18,505.38		
Buckingham,	45,000.00		
Carew Street,	18,000.00		
Carlisle,	3,000.00		
Central High,	172,800.00		
Central Street,	20,000.00		
Charles Street,	4,000.00		
Chestnut Street,	41,000.00		
Dry Bridge,	1,000.00		
Eastern Avenue,	5,400.00		
East Union Street,	5,000.00		
Emery Street Shop and Storehouse,	7,000.00		
Five Mile Pond,	500.00		
Forest Park,	30,000.00		
Glenwood,	2,500.00		
High School of Commerce,	174,200.00		
Homer Street,	32,350.48		
Hooker (Old),	148,600.00		
Hooker (New),	29,500.00		
Howard Street,	38,600.00		
Indian Orchard Grammar,	39,000.00		
Indian Orchard Primary,	3,000.00		
Jefferson Avenue,	7,500.00		
Junior High,	69,000.00		
Kensington Avenue,	10,500.00		
Liberty,	18,341.34		
Lincoln,	24,000.00		
School Street,	35,500.00		
Sixteen Acres,	500.00		
Strickland,	5,000.00		
Sumner Avenue,	49,000.00		
Tapley,	22,000.00		
Technical High,	157,180.80		
Vocational,	50,710.95		
Wachogue,	200.00		
Washington,	15,270.54		
Forward,	$1,356,141.27	$5,472,843.74	$8,275,580.11

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Forward,		$1,356,141.27 $5,472,843.74	$8,275,580.11
SCHOOL DEPARTMENT (Cont.).			
Land (Cont.).			
White Street,	14,000.00		
Wilbraham Road,	23,123.80		
William Street,	14,000.00		
Worthington Street,	12,000.00		
		1,419,265.07	
			6,892,108.81
SOLDIERS' RELIEF COMMISSIONER.			
Equipment.			
Office,			75.98
STREETS AND ENGINEERING, DEPARTMENT OF.			
Buildings.			
Ashes and Garbage Station, State Street,	$22,724.00		
Cement Shed and Platform,	873.00		
Emery Street Shop,	22,932.00		
Incinerator, Logan Street,	24,500.00		
South End Yard, east side Pecousic Avenue,	4,194.00		
South End Yard, west side Pecousic Avenue,	19,600.00		
State Street Storehouse,	2,425.00		
Summer Street Yard,	35,450.00		
Summer Street Yard, Trap Rock Bins, and Trestle,	24,942.96		
		$157,640.96	
Equipment.			
Asphalt Plant,	$11,169.68		
Automobiles,	12,068.50		
Baling Press,	1,059.67		
Blacksmith Shop,	1,077.48		
Carpenter Shop,	734.87		
Concrete Mixer,	3,913.97		
Engineering Division,	4,540.05		
Garage,	1,340.55		
Harnesses and Fittings,	1,669.36		
Highway and Road Machinery,	3,176.47		
Horses,	9,025.00		
Laboratory,	458.51		
Machine Shop,	1,257.04		
Merz Plant,	5,710.50		
Motorcycles,	287.50		
Motor Trucks,	47,311.40		
Office Furniture, etc.,	3,905.73		
Paint Shop,	75.00		
Patterns,	724.12		
Sewer Division,	1,323.30		
Sleighs and Sleds,	2,120.00		
Small Tools,	16,680.70		
Stables and Yards,	22,608.79		
Steam Rollers,	16,706.56		
Steam Shovel,	5,094.14		
Street Cleaning,	2,280.78		
Street Lighting,	1,134.68		
Forward,	$177,454.35	$157,640.96	$15,167,764.90

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Forward,	$177,454.35	$157,640.96	$15,167,764.90
STREETS AND ENGINEERING, DEPARTMENT OF (Cont.).			
Equipment (Cont.).			
Tractor,	3,604.00		
Wagons and Carts,	7,389.08		
Water Carts,	524.04		
		188,971.47	
Land.			
Abbe Avenue Crossing,	$13,500.00		
Adams Street,	1,400.00		
67 Arch Street,	1,000.00		
Ashes and Garbage Station, State Street,	37,400.00		
Birnie Avenue Extension,	1,300.00		
Boston Road, Gravel Bank,	585.00		
Broadway,	77,600.00		
Carew Street,	1,000.00		
Dwight Street,	286.00		
Emery Street, Dunn Lot,	8,320.00		
Five Mile Pond, Gravel Bank,	5,850.00		
Fulton Street,	47,980.00		
Island Pond, Gravel Bank,	390.00		
Locust Street,	3,090.00		
Logan Street Yard,	17,300.00		
Longhill Dump,	10,400.00		
Marble Street,	3,900.00		
Marshall Street,	840.00		
Page Boulevard,	526.00		
Pecousic Avenue, east side,	24,700.00		
Pecousic Avenue, west side,	14,300.00		
Between Pecousic Avenue and South Street,	2,600.00		
Summer Street Yard,	167,222.00		
Stafford Street,	155.00		
Taylor Street,	20,100.00		
Trap Rock Quarry, Westfield,	3,744.00		
		465,488.00	
			812,100.43
WEIGHTS AND MEASURES, SEALER OF.			
Equipment.			
Automobile,		$700.00	
Miscellaneous,		1,483.83	
Office,		167.00	
			2,350.83
WORKMEN'S COMPENSATION AGENT.			
Equipment.			
Office,			23.58
Total Capital Fund Property,			$15,982,239.74

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WATER FUND.

WATER DEPARTMENT.

Distribution.			
Buildings, Furnishings, and Grounds,	$106,868.95		
Land and Easements,	81,940.68		
Structures and Equipment,	2,120,772.55		
		$2,309,582.18	
Little River Supply.			
Buildings, Furnishings, and Grounds,	$15,947.59		
Land and Easements,	246,715.95		
Structures and Equipment,	2,155,878.56		
		2,418,542.10	
Ludlow Supply.			
Buildings, Furnishings, and Grounds,	$3,984.84		
Land and Easements,	86,712.20		
Structures and Equipment,	333,789.19		
		424,486.23	
Miscellaneous Construction and Equipment Costs, Not Includible Elsewhere.			
Intangible Assets,		505,120.53	
Total Water Fund Property,			5,657,731.04
Total Property,			$21,639,970.78

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PROPERTY ADDITIONS.
During Year Ended November 30, 1921.
GENERAL FUND.

Assessors, Board of:		
Office Equipment,		$2,997.62
Building Commissioner:		
Automobile,		552.33
Charities, Department of:		
Office Equipment,	$166.39	
Property Improvement,	167.00	333.39
City Auditor:		
Office Equipment,		46.80
City Collector:		
Office Equipment,		1,007.49
City Planning Board:		
Office Equipment,		50.00
City Treasurer:		
Office Equipment,		15.00
Elections:		
Office Equipment,		191.55
Fire Department:		
Automobile,	$4,820.95	
Furniture and Furnishings,	210.25	
Property Improvement,	9,985.87	
Miscellaneous Equipment,	2,698.55	17,715.62
Health Department:		
Automobile,	$865.00	
Hospital Equipment,	2,591.50	
Office Equipment,	96.19	
Miscellaneous Equipment,	160.30	3,712.99
Law Department:		
Library,		176.44
Mayor:		
Louis Orr Etching,		200.00
Police Department:		
Automobile,	$2,500.00	
Furniture and Furnishings,	180.77	
Miscellaneous Equipment,	1,167.95	
Motorcycles,	1,575.00	5,423.72
Public Buildings, Department of:		
Militia Rifle Range:		
Furniture and Furnishings,	$1,262.44	
Municipal Group Buildings:		
Furniture and Furnishings,	2,911.44	
Municipal Heating Plant:		
Furniture and Furnishings,	216.00	
Schoolhouses:		
Furniture and Furnishings,	6,790.67	
Miscellaneous Equipment,	1,517.52	
Property Improvement,	6,934.80	19,632.87
		$52,055.82

		$52,055.82
Public Parks, Department of:		
Automobile,	$6,361.35	
Buildings,	3,368.00	
Land	2,384.60	
Miscellaneous Equipment,	2,366.84	14,480.79
Public Works, Board of:		
Office Equipment,		50.00
School Department:		
Furniture and Furnishings,	$11,708.24	
Miscellaneous Equipment,	13,999.59	25,707.83
Streets and Engineering, Department of:		
Asphalt Plant,	$1,291.41	
Automobiles,	14,018.20	
Carpenter Shop,	185.00	
Concrete Mixer,	1,113.23	
Engineering Division,	108.97	
Garage,	567.50	
Harnesses and Fittings,	400.25	
Highway and Road Machinery,	1,525.40	
Horses,	1,850.00	
Laboratory,	18.00	
Machine Shop,	418.44	
Motor Trucks,	7,452.69	
Office Equipment,	1,199.07	
Paint Shop,	75.00	
Sewer Division,	688.87	
Sleighs and Sleds,	151.50	
Stables and Yards,	4,558.55	
Steam Rollers,	6,994.03	
Street Cleaning,	674.33	
Street Lighting,	857.68	
Tractor Equipment,	3,720.00	
Wagons and Carts,	190.47	47,558.59
Weights and Measures, Sealer of:		
Miscellaneous Equipment,		120.23
Special Accounts:		
Hooker School Remodeling,	$724.06	
Hooker School Public Sanitary,	3,592.16	
Land for Schoolhouse Purposes, Indian Orchard,	32,500.00	
Liberty School,	600.00	
Pynchon Street School Alterations,	23,956.19	61,372.41
Total Additions during Year,		$201,345.67

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STORES.

Inventory as for November 30, 1921.

(Schedule C.)

GENERAL FUND.		
Public Buildings, Department of,	$3,467.83	
Streets and Engineering, Department of,	48,130.64	
		$51,598.47
WATER FUND:		
Water Department,		159,703.32
		$211,301.79

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TAX TITLES.

As of November 30, 1921.

(Schedule D.)

Title to the following parcels of real estate acquired and held by the City of Springfield by reason of the non-payment of taxes and special assessments:

Name.	Location.	Amount.
Bellamy, Charles J.,	265-271 Dwight Street and 78 Hillman Street,	$2,508.31
*Bellamy, Charles J.,	265-271 Dwight Street and 78 Hillman Street,	3,442.36
Chamberlain, Heirs of G. W.,	86-88 Main Street,	133.09
Goetting, Mary D.,	122 Franklin Street,	180.47
Goetting, Mary D.,	222-230 Main Street,	4,269.99
Goetting, Mary D.,	47-59½ Main Street,	2,207.70
Goetting, Mary D.,	39-45 Main Street,	3,482.10
Goetting, Mary D.,	13 Patton Street,	140.63
Goetting, Mary D.,	326-334 Dwight Street,	1,810.46
Goetting, Mary D.,	169 Maple Street,	1,438.95
Krentz, Morris,	128-130 Sharon Street,	283.48
Lang, Howard W., Trustee,	385 Liberty Street,	11,067.49
Lay, William,	47-59½ Main Street,	848.02
Lay, William,	13 Patton Street,	70.35
*Market Square Syndicate, Trustees of,	270-282 Dwight Street,	30,656.95
Shapiro, Isaac A. and Lena,	33 Patton Street,	278.61
Shoopilsky, H. and M.,	115-121 Franklin Street,	68.90
Springfield Baking Co.,	33 Patton Street,	127.83
Springfield Warehouse Trust,	South Side Liberty Street,	1,277.64
Winniman, Abraham,	60 Norwood Street,	431.65
Total,		$64,724.98

*Betterment Assessment.

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BONDED DEBT—SUMMARY.

(Schedule E.)

	November 30.		November 30, 1921.	
	1921.	1920.	Increase.	Decrease.
"City" Debt within statutory limit:				
Sinking Fund Bonds,	$965,000.00	$1,090,000.00		$125,000.00
Deduct Investments,	828,759.63	891,144.76		62,385.13
	$136,240.37	$198,855.24		62,614.87
Serial Bonds,	4,388,000.00	3,842,500.00	$545,500.00	
	$4,524,240.37	$4,041,355.24	482,885.13	
"City" Debt outside statutory limit:				
Serial Bonds,	3,726,000.00	3,433,000.00	293,000.00	
Net "City" Debt,	$8,250,240.37	$7,474,355.24	775,885.13	
"Water" Debt:				
Sinking Fund Bonds,	$150,000.00	$150,000.00		
Deduct Investments,	127,066.69	107,601.16	19,465.53	
	$22,933.31	$42,398.84		19,465.53
Serial Bonds,	1,487,000.00	1,576,000.00		89,000.00
Net "Water" Debt,	$1,509,933.31	$1,618,398.84		108,465.53
Total Net Debt,	$9,760,173.68	$9,092,754.08	667,419.60	

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BONDED DEBT SERIALS.

WITHIN STATUTORY LIMIT	Issued	Coupon or Reg.	Rate	Original Issue	Paid	Outstanding	Annual Retirement	Payable
Sewer,	1901	Reg.	3½	$25,000	$20,000	$5,000	$1,000	September
Sewer,	1904	Reg.	3½	40,000	34,000	6,000	2,000	August
Sewer,	1908	Reg.	4	50,000	32,500	17,500	2,500	October
Sewer,	1913	Reg.	4	50,000	16,000	34,000	2,000	November
Sewer,	1919	Reg.	4½	50,000	4,000	46,000	2,000	July
Sewer,	1921	C. R.	5	225,000		225,000	8,000a	October
City Hall,	1907	Reg.	4	170,000	119,000	51,000	9,000b	July
School, Kensington Avenue,	1908	Reg.	4	110,000	71,500	38,500	5,500	October
School, Lincoln,	1909	Reg.	4	100,000	60,000	40,000	5,000	October
School, Buckingham,	1913	Reg.	4¼	220,000	88,000	132,000	11,000	November
School,	1918	Reg.	4¼	39,500	16,000	23,500	2,000c	November
School,	1916	Reg.	4	540,000	135,000	405,000	27,000	November
School,	1919	C. R.	4¼	627,000	66,000	561,000	33,000	November
School, Vocational,	1920	C. R.	5	260,000	13,000	247,000	13,000	October
High School of Commerce,	1913	Coup.	4	500,000	200,000	300,000	25,000	November
High School of Commerce,	1914	Coup.	4½	150,000	56,000	94,000	8,000d	November
High School of Commerce,	1915	Coup.	4	350,000	108,000	242,000	18,000e	November
Junior High School,	1920	C. R.	5	200,000	10,000	190,000	10,000	October
Junior High School,	1921	C. R.	4½	600,000		600,000	30,000	October
Fire and Police Buildings,	1910	Reg.	4	340,000	187,000	153,000	17,000	October
Public Buildings,	1911	Reg.	4	320,000	160,000	160,000	16,000	October
Municipal,	1913	Reg.	4¼	55,500	45,500	10,000	5,000f	November
Fulton Street Widening,	1914	Coup.	4½	400,000	140,000	260,000	20,000	November
Water Street Widening,	1920	Reg.	5	60,000	6,000	54,000	6,000	October
School and Fire,	1914	Reg.	4½	250,000	91,000	159,000	13,000g	November
Dwight-Willow and Hillman Streets Extension,	1915	Reg.	4	70,000	42,000	28,000	7,000	November
Land and Buildings,	1917	C. R.	4½	300,000	60,000	240,000	15,000	November
Land for Municipal Purposes,	1920	Reg.	5	70,000	3,500	66,500	3,500	October
				$6,172,000	$1,784,000	$4,388,000	$316,500	

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BONDED DEBT SERIALS.—*Concluded.*

Outside Statutory Limit	Issued	Coupon or Reg.	Rate	Original Issue	Paid	Outstanding	Annual Retirement	Payable
Municipal Buildings,.....	1909	C. R.	3½	$600,000	$180,000	$420,000	$15,000	November
Municipal Buildings,.....	1910	C. R.	4	400,000	110,000	290,000	10,000	November
Municipal Buildings,.....	1912	C. R.	4	525,000	122,000	403,000	13,000h	November
Municipal Buildings,.....	1914	C. R.	4	200,000	35,000	165,000	5,000	November
Municipal Buildings,.....	1920	Reg.	5	75,000	5,000	70,000	5,000	October
Dwight and Water Streets Railroad Underpasses,..	1913	Coup.	4	400,000	112,000	288,000	14,000j	November
Dwight and Water Streets Railroad Underpasses,..	1915	Coup.	4	200,000	60,000	140,000	10,000	November
Dwight and Water Streets Railroad Underpasses,..	1921	C. R.	5	200,000		200,000	20,000	October
Dwight Street Widening and Extension,.....	1917	C. R.	4½	800,000	120,000	680,000	40,000	December
Dwight Street Widening and Extension,.....	1918	C. R.	4	200,000	20,000	180,000	10,000	December
Dwight Street Widening and Extension,.....	1918	C. R.	4½	500,000	50,000	450,000	25,000	December
Dwight Street Widening and Extension,.....	1920	C. R.	5	200,000	10,000	190,000	10,000	October
Taylor and Stafford Streets Extension,.....	1921	C. R.	5	250,000		250,000	25,000	October
				$4,550,000	$824,000	$3,726,000	$202,000	
Water Debt								
Little River,.....	1907	C. R.	4	$270,000	$120,000	$150,000	$10,000	January
Little River,.....	1908	C. R.	4	270,000	110,000	160,000	10,000	January
Little River,.....	1909	C. R.	3½	1,080,000	400,000	680,000	40,000	January
Little River,.....	1910	C. R.	3½	378,000	126,000	252,000	14,000	January
Little River,.....	1913	C. R.	4½	250,000	80,000	170,000	10,000	November
Little River,.....	1916	C. R.	3½	100,000	25,000	75,000	5,000	November
				$2,348,000	$861,000	$1,487,000	$89,000	
Total without Sinking Funds,.....				$13,070,000	$3,469,000	$9,601,000	$607,500	

Note:—a—$8,000 1922—1936; $7,000 1937—1951.
b—$9,000 even years; $8,000 odd years.
c—$2,000 until Nov. 1, 1932; $1,500 Nov. 1, 1933.
d—$8,000 1915—1924; $7,000 1925—1934.
e—$18,000 1916—1925; $17,000 1926—1935.
f—$6,500 1914; $6,000 1915—1918; $5,000 1919—1923.
g—$13,000 1915—1924; $12,000 1925—1935.
h—$14,000 1913—1917; $13,000 1918—1952.
j—$14,000 1914—1923; $13,000 1924—1943.

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BONDED DEBT WITH SINKING FUNDS.

	Dated	Years	Rate	Coupon or Reg.	Due	Amount	Sinking Funds
School,	Oct., 1902	20	3½	Reg.	Oct., 1922	$55,000.00	
School,	Sept., 1903	20	3½	C. R.	Sept., 1923	40,000.00	
School,	Jan., 1905	20	3½	Reg.	Jan., 1925	396,000.00	
School,	Nov., 1906	20	4	C. R.	Nov., 1926	207,000.00	
Schools, Total,						$698,000.00	$606,990.71
Sewer,	June, 1900	30	3	C. R.	June, 1930	142,000.00	99,812.28
Public Parks,	June, 1903	20	3½	Reg.	June, 1923	125,000.00	121,956.69
						$965,000.00	$828,759.63
Water,	Oct., 1893	30	4	Coup.	Oct., 1923	150,000.00	127,066.69
Total with Sinking Funds,						$1,115,000.00	$955,826.32

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SINKING FUNDS, NOVEMBER, 1920—1921.

Loan	Cash		Bonds, United States and Massachusetts		Bonds, City of Springfield		Bonds, Municipal	
	1921	1920	1921	1920	1921	1920	1921	1920
Schools,	$21,990.71	$37,454.30	$191,000.00	$136,000.00	$278,000.00	$297,000.00	$67,000.00	$123,000.00
Sewer,	8,612.23	8,509.29	8,000.00	8,000.00	43,000.00	43,000.00	16,000.00	16,000.00
Public Parks,	10,256.69	13,281.17	33,000.00	13,000.00	42,000.00	42,000.00	16,000.00	21,000.00
	$40,859.63	$54,244.76	$232,000.00	$157,000.00	$363,000.00	$382,000.00	$99,000.00	$160,000.00
Water,	3,066.69	601.16	38,000.00	8,000.00	26,000.00	51,000.00	40,000.00	28,000.00
	$43,926.32	$54,845.92	$270,000.00	$165,000.00	$389,000.00	$433,000.00	$139,000.00	$188,000.00

Loan	Bonds, Railroad		Bonds, Street Railway		Totals		Increase	Decrease
	1921	1920	1921	1920	1921	1920	1921	1921
Schools,	$46,500.00	$84,500.00	$2,500.00	$2,500.00	$606,990.71	$680,454.30		$73,463.59
Sewer,	19,000.00	19,000.00	5,200.00	5,200.00	99,812.23	94,709.29	$5,102.94	
Public Parks,	13,000.00	19,000.00	7,700.00	7,700.00	121,956.69	115,981.17	5,975.52	
	$78,500.00	$122,500.00	$15,400.00	$15,400.00	$828,759.63	$891,144.76		$62,385.13
Water,	20,000.00	20,000.00			127,066.69	107,601.16	$19,465.53	
	$98,500.00	$142,500.00	$15,400.00	$15,400.00	$955,826.32	$998,745.92		$42,919.60

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BONDED DEBT—MATURITIES.

	"City" Serial Within Limit	"City" Serial Outside Limit	"City" with Sinking Funds	"Water" with Sinking Funds	"Water" Serial	Totals	
						With Sinking Funds	Without Sinking Funds
Nov. 30, 1920	$3,342,500.00	$3,433,000.00	$1,090,000.00	$150,000.00	$1,576,000.00	$1,240,000.00	$8,851,500.00
Issued 1920-21	825,000.00	450,000.00					1,275,000.00
	$4,667,500.00	$3,883,000.00	$1,090,000.00	$150,000.00	$1,576,000.00	$1,240,000.00	$10,126,500.00
Paid 1920-21	279,500.00	157,000.00	125,000.00		89,000.00	125,000.00	525,500.00
Nov. 30, 1921	$4,388,000.00	$3,726,000.00	$965,000.00	$150,000.00	$1,487,000.00	$1,115,000.00	$9,601,000.00
Due 1921		$75,000.00					$75,000.00
1922	$316,500.00	202,000.00	$55,000.00		$89,000.00	$55,000.00	607,500.00
1923	315,500.00	202,000.00	165,000.00	$150,000.00	89,000.00	315,000.00	606,500.00
1924	311,500.00	201,000.00			89,000.00		601,500.00
1925	306,500.00	201,000.00	396,000.00		89,000.00	396,000.00	596,500.00
1926	299,500.00	201,000.00	207,000.00		89,000.00	207,000.00	589,500.00
1927	297,500.00	201,000.00			89,000.00		587,500.00
1928	289,500.00	201,000.00			89,000.00		579,500.00
1929	281,500.00	201,000.00			89,000.00		571,500.00
1930	276,500.00	201,000.00	142,000.00		89,000.00	142,000.00	566,500.00
1931	253,500.00	201,000.00			89,000.00		543,500.00
1932	237,500.00	156,000.00			89,000.00		482,500.00
1933	237,000.00	156,000.00			89,000.00		482,000.00
1934	199,500.00	156,000.00			89,000.00		444,500.00
1935	160,500.00	156,000.00			89,000.00		405,500.00
1936	143,500.00	141,000.00			89,000.00		373,500.00
1937	115,500.00	141,000.00			74,000.00		330,500.00
1938	100,500.00	101,000.00			64,000.00		265,500.00
1939	65,500.00	66,000.00			14,000.00		145,500.00
1940	65,500.00	66,000.00					131,500.00
1941	39,000.00	56,000.00					95,000.00
1942	9,000.00	56,000.00					65,000.00
1943	9,000.00	56,000.00					65,000.00
1944	9,000.00	43,000.00					52,000.00
1945	7,000.00	43,000.00					50,000.00
1946	7,000.00	43,000.00					50,000.00
1947	7,000.00	43,000.00					50,000.00
1948	7,000.00	43,000.00					50,000.00
1949	7,000.00	43,000.00					50,000.00
1950	7,000.00	28,000.00					35,000.00
1951	7,000.00	18,000.00					25,000.00
1952		18,000.00					18,000.00
1953		5,000.00					5,000.00
1954		5,000.00					5,000.00
	$4,388,000.00	$3,726,000.00	$965,000.00	$150,000.00	$1,487,000.00	$1,115,000.00	$9,601,000.00

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SCHEDULE OF APPROPRIATIONS AS OF NOVEMBER 30, 1921.

GENERAL FUND.

(Schedule F.)

Department.	Original.	As Modified to Date.	Charges During Year.	Reserved for Encumbrance.	Unencumbered Balance.
Administration of Trust Funds,	$425.00	$425.00	$425.00		
Assessors, Board of,	44,085.00	49,085.00	48,782.97	$25.00	$277.03
Building Commissioner,	29,685.00	31,985.00	31,258.92		726.08
Celebrations:					
Armistice Day,		400.00	360.00		40.00
Christmas Eve,		1,000.00	880.00		120.00
Independence Day,	2,500.00	4,300.00	4,300.00		
Memorial Day,	1,275.00	2,267.50	2,247.96		19.54
Charities, Department of:					
Administration,	17,084.00	18,619.00	18,583.50		35.50
Almshouse,	61,819.00	63,726.83	61,460.95	23.47	2,242.41
Outside Relief,	66,000.00	98,682.53	98,681.03		1.50
Wayfarers' Lodge,	7,917.00	7,991.64	7,708.81		282.83
City Auditor,	16,919.00	16,919.00	16,897.91		21.09
City Clerk,	17,103.00	17,103.00	16,756.56		346.44
City Collector,	34,543.00	34,543.00	34,003.01		539.99
City Council,	4,225.00	7,725.00	7,136.74		588.26
City Planning Board,		21,000.00	9,285.80	10,000.00	1,714.20
City Treasurer,	18,091.00	18,391.00	18,228.56		162.44
Damages—Land,	5,000.00	5,000.00	2,088.77		2,911.23
Damages—Persons and Property,	4,000.00	5,000.00	4,185.81		814.19
Elections,	44,792.00	24,792.00	17,082.39		7,709.61
Fire Department:					
Administration,	27,366.00	26,841.00	26,705.59		135.41
Fire Alarm System,	24,199.00	23,629.00	21,835.56	815.53	977.91
Operation,	625,052.00	628,177.00	626,358.62	128.89	1,689.49
Fish Warden,	25.00	25.00	25.00		
Forest Warden,	100.00	100.00	100.00		
Health Department:					
Administration,	25,397.00	25,397.00	24,658.83		738.17
Dental Clinic,	7,105.00	7,125.16	6,835.15		290.01
Hospital,	56,980.00	59,513.48	51,361.57		8,151.91
Laboratories and Milk Inspection,	10,236.00	10,236.00	9,827.58		408.42
Medical Inspection of School Children,	21,954.00	21,954.00	21,837.14		116.86
Tuberculosis Dispensary,	4,124.00	4,124.00	3,997.91		126.09
Land for Schoolhouse Purposes,		32,500.00	32,500.00		
Law Department,	12,867.00	12,867.00	12,236.67		630.33
License Commissioners, Board of,	835.00	835.00	683.54		151.46

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SCHEDULE OF APPROPRIATIONS AS OF NOVEMBER 30, 1921.

GENERAL FUND.—Continued.
(Schedule F.)

Department.	Original.	As Modified to Date.	Charges During Year.	Reserved for Encumbrances.	Unencumbered Balance.
Mayor,	$11,607.00	$11,607.00	$9,878.63		$1,728.37
Municipal Debt:					
Interest—City Debt,	344,778.75	344,778.75	344,778.75		
Interest—Temporary Loans,	90,000.25	127,582.57	123,011.42		4,571.15
Interest—Trust Funds,	200.00	200.00	179.69		20.31
Interest—State Tax,		2,417.68	2,417.68		
Serials—City Debt,	436,500.00	436,500.00	436,500.00		
Serials—Sinking Funds,	28,000.00	28,000.00	28,000.00		
Police Department,	448,020.00	451,762.58	449,342.93	$2,397.00	22.65
Printing, Committee on,	6,120.00	6,120.00	6,106.71		13.29
Public Buildings, Department of:					
Administration,	10,290.00	10,290.00	10,234.33		55.67
Militia Rifle Range,	721.00	2,721.00	2,477.57		243.43
Municipal Group Buildings,	62,537.00	69,437.00	68,579.26	756.75	100.99
Municipal Heating Plant,	24,468.00	24,268.00	20,506.59	1,569.71	2,191.70
Municipal Organ Concerts,	1,500.00	1,500.00	355.26	1,144.74	
Schools—Maintenance,	98,160.00	106,260.00	99,849.21	3,847.68	2,563.11
Schools—Operation,	283,377.00	287,977.00	283,080.71	3,379.77	1,516.52
Public Library,	137,737.00	137,737.00	137,737.00		
Public Parks, Department of:					
Administration,	32,878.00	32,489.45	32,430.42		59.03
Operation,	204,267.00	213,398.66	213,355.30		43.36
Public Works, Board of,	2,994.00	2,994.00	2,162.20		831.80
Refunds,	5,000.00	5,000.00	3,973.52		1,026.48
Reserve for Contingencies,	360,000.00	380,000.00	368,562.70		11,437.30
School Department:					
Administration,	40,080.00	42,530.00	40,578.92	52.50	1,898.58
Central High School,	130,507.00	130,337.00	127,456.50	558.99	2,321.51
Continuation School,	50,741.00	50,001.00	46,443.38	557.50	3,000.12
Evening Schools, Elementary,	24,100.00	22,575.00	20,501.13		2,073.87
Evening Schools, High,	11,460.00	10,860.00	10,630.46	127.50	102.04
Evening Schools, Trades,	12,820.00	11,320.00	10,829.10	90.58	400.32
Evening Schools, Vocational,	3,169.00	1,969.00	1,367.73		601.27
Graded Schools and Junior High,	1,142,399.00	1,156,760.69	1,151,365.23	2,839.27	2,556.19
Graded Schools, Lunches,	1,380.00	1,750.00	1,668.45		81.55
High School of Commerce,	146,170.00	142,880.00	142,534.01	30.00	315.99
High School, Lunches,	53,530.00	59,783.90	59,726.24		57.66
Kindergartens,	79,761.00	79,278.00	77,089.43	95.57	2,093.00

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SCHEDULE OF APPROPRIATIONS AS OF NOVEMBER 30, 1921.

GENERAL FUND.—Continued.
(Schedule F.)

Department.	Original.	As Modified to Date.	Charges During Year.	Reserved for Encumbrances.	Unencumbered Balance.
School Department (Cont.):					
Summer Schools,	$11,280.00	$11,280.00			$11,280.00
Summer Schools, Vocational,		3,252.00	$3,235.28		16.72
Technical High School,	143,398.00	147,153.30	147,070.96	$45.00	37.34
Vocational School,	36,630.00	39,488.34	38,430.61	80.00	977.73
Smoke Inspector,	470.00	470.00	418.89		51.11
Soldiers' Relief Commissioner,	24,271.00	41,666.00	40,288.80		1,377.20
Soldiers' and Sailors' Graves, Care of,	884.00	884.00	876.00		8.00
Streets and Engineering:					
Administration,	36,859.00	39,659.00	38,766.65	237.65	654.70
Ashes and Refuse Disposal,	167,270.00	160,270.00	152,296.97		7,973.03
Bridges,	36,740.00	28,240.00	21,130.57	154.75	6,954.68
Engineering,	34,596.00	34,596.00	34,267.81	10.00	318.19
Garbage Collection,	50,150.00	49,150.00	41,998.34		7,151.66
Highways,	437,000.00	439,705.60	429,654.51	1,100.81	8,950.28
Repair Shops,	34,050.00	38,850.00	36,845.32	4.25	2,000.43
Sewers,	85,000.00	89,963.00	82,176.77	645.00	7,141.23
Sidewalks and Curbing,	64,200.00	68,500.00	66,158.21		2,341.79
Stables and Yards,	202,580.00	222,580.00	197,214.56	537.46	24,827.98
Street Cleaning,	136,005.00	153,555.00	151,960.84		1,594.16
Street Lighting,	152,705.00	152,705.00	148,586.94	39.40	4,078.66
Street Oiling,	33,075.00	35,075.00	34,772.97		302.03
Street Sprinkling,	14,505.00	13,005.00	11,863.44		1,141.56
Tax Exemptions—Soldiers and Sailors,	1,200.00	1,200.00	1,059.93		140.07
Weights and Measures, Sealer of,	8,859.00	8,859.00	8,543.90	75.00	240.10
Wires, Inspector of,	2,825.00	7,180.00	2,442.08	1,837.14	2,900.78
Workmen's Compensation,	6,500.00	11,500.00	9,600.42		1,899.58
Special Accounts:					
Armory Street Fire Station,		10,238.87	9,985.87		253.00
City Realty, Committee on,		345.80	261.08		84.72
East Springfield Park,		3,368.00	3,368.00		
Hooker School Remodeling,		735.93	724.06		11.87
Liberty School,		843.58	600.00		243.58
Springfield-Ludlow Bridge,		30,000.00	26,459.48		3,540.52
State Street Junior High,		10,000.00	10,000.00		
Transportation, Committee on,		450.00	405.15		44.85
Unemployment Relief,		25,000.00	19,183.26		5,816.74
Veterans' Headquarters,		400.00	200.00		200.00
Vocational School Building,		16,000.00	16,000.00		

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SCHEDULE OF APPROPRIATIONS AS OF NOVEMBER 30, 1921.

GENERAL FUND.—Concluded.

(Schedule F.)

Department.	Original.	As Modified to Date.	Charges During Year.	Reserved for Encumbrances.	Unencumbered Balance.
Credits Available for Re-appropriation:					
Assessors, Board of,		$17.00			$17.00
Charities, Department of,		9,055.98			9,055.98
City Collector,		62.53			62.53
Fire Department,		35.00			35.00
Police Department,		50.42			50.42
Public Buildings, Department of,		4,719.51			4,719.51
Public Parks, Department of,		286.92			286.92
Refunds Payable,		10.08			10.08
School Department,		96.63			96.63
Soldiers' Relief Commissioner,		135.00			135.00
Streets and Engineering, Department of,		4,500.42			4,500.42
	$7,198,027.00	$7,590,502.33	$7,359,875.98	$33,206.91	$197,419.44
Special Accounts (Carried Forward):					
Almshouse Addition,		$6,500.00			$6,500.00
Berkshire Avenue Bridge,		500.00	$303.11		196.89
Celebrations—Christmas Eve,		1,000.00			1,000.00
Forest Park Extension,		10,000.00	3,895.10		6,104.90
Gerrish Park,		586.01			586.01
Hooker School Public Sanitary,		9,000.00	3,592.16	$4,738.70	669.14
Porter Lake,		7,743.14	339.23		7,403.91
Pynchon Street Schoolhouse Removal,	$40,000.00	53,000.00	50,676.19	875.22	1,448.59
Revision of Ordinances,		3,820.47			3,820.47
Soldiers' and Sailors' Memorial,		15,000.00			15,000.00
South End Bridge Repairs,		50,000.00	1,379.05	33,971.86	14,649.09
Springfield-West Springfield Bridge,		14,506.29	13,998.77		507.52
Stores—Department of Public Buildings,		3,881.74	3,467.83		413.91
Stores—Department of Streets and Engineering,		96,873.32	48,130.64	6,465.35	42,277.33
World War Military Service Census,		821.94	44.90		777.04
	$40,000.00	$273,232.91	$125,826.98	$46,051.13	$101,354.80
Grand Total,	$7,238,027.00	$7,863,735.24	$7,485,702.96	$79,258.04	$298,774.24

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SCHEDULE OF APPROPRIATIONS AS OF NOVEMBER 30, 1921.

CAPITAL FUND.

(Schedule F.)

	As Modified to Date.	Charges During Year.	Reserved for Encumbrances.	Unencumbered Balance.
Chestnut Street School Addition,	$8,002.15	$8,002.15		
Dwight Street Underpass,	77,005.05	75,042.50		$1,962.55
Dwight Street Widening,	235,624.23	234,609.93		1,014.30
Forest Park School Addition,	17,115.24	11,817.30	$70.84	5,227.10
Homer Street School Addition,	10,922.27	9,561.93		1,360.34
Junior High School,	800,000.00	12,121.71		787,878.29
Municipal Group,	1,500.00		1,500.00	
Pearl Street Widening,	24,000.00	23,274.39		725.61
Sewer Construction, 1921,	225,000.00	224,971.65		28.35
Stafford Street Extension,	50,000.00	46,583.65		3,416.35
State Street Junior High,	3,063.00	3,063.00		
Surface Sewer, 1919,	3,609.43	3,609.43		
Taylor Street Extension,	200,000.00	119,844.74		80,155.26
Technical High School, Additional Land,	18,863.67			18,863.67
Vocational School,	174,151.78	161,274.92		12,876.86
Water Street Underpass,	181,079.81	175,092.50		5,987.31
Water Street Widening,	24,975.00	246.50		24,728.50
Wilbraham Road School,	876.20			876.20
	$2,055,787.83	$1,109,116.30	$1,570.84	$945,100.69

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APPROPRIATION CHARGES

(Exclusive of Encumbrances)

FOR THE

FISCAL YEAR ENDED NOVEMBER 30, 1921.

(Supporting Schedule F.)

GENERAL FUND.

Code.				
GF	ADMINISTRATION OF TRUST FUNDS:			
GF 00	Personal Services,.....		$400.00	
GF 20	Fixed Charges and Contributions,.....		25.00	
21	Rents,.....	$25.00		
				$425.00
GS	ASSESSORS, BOARD OF:			
GS 00	Personal Services,.....		$37,466.13	
GS 10	Services Other Than Personal,.....		7,263.52	
11	Transportation of Persons,.....	83.59		
12	Transportation of Things,.....	5.55		
13	Subsistence and Support of Persons,..	73.17		
15	Communication Service,.....	564.05		
16	Printing, Engraving, and Binding,....	6,392.15		
17	Advertising and Publications,.....	32.58		
19	Miscellaneous Services,.....	112.43		
GS 20	Fixed Charges and Contributions,.....		25.00	
29	Miscellaneous Fixed Charges,.....	25.00		
GS 30	Supplies,.....		748.11	
31	Office Supplies,.....	712.11		
39	Miscellaneous Supplies,.....	36.00		
GS 50	Equipment and Parts,.....		3,280.21	
54	Furniture and Furnishings,.....	3,280.21		
				48,782.97
PB	BUILDING COMMISSIONER:			
PB 00	Personal Services,.....		$27,955.88	
PB 10	Services Other Than Personal,.....		1,788.06	
11	Transportation of Persons,.....	430.76		
13	Subsistence and Support of Persons,...	22.61		
14	Care of Animals and Vehicles,.....	768.86		
15	Communication Service,.....	90.00		
16	Printing, Engraving, and Binding,....	439.83		
19	Miscellaneous Services,.....	36.00		
PB 20	Fixed Charges and Contributions,.....		50.00	
23	Taxes and Fees,.....	50.00		
PB 30	Supplies,.....		907.15	
31	Office Supplies,.....	62.98		
32	Fuel,.....	522.86		
33	Mechanics' Supplies,.....	314.55		
34	Cleaning and Toilet Supplies,.....	6.76		
PB 50	Equipment and Parts,.....		557.83	
52	Production, Construction, and Conveying Equipment,.....	557.83		
				31,258.92

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Code.				
OS	CELEBRATIONS:			
OS 20	Fixed Charges and Contributions,.....		$7,787.96	
	Armistice Day,.....	$360.00		
	Christmas Eve,.....	880.00		
	Independence Day,.....	4,300.00		
	Memorial Day,.....	2,247.96		
				$7,787.96
CC	CHARITIES, DEPARTMENT OF:			
CCA	ADMINISTRATION.			
CCA 00	Personal Services,.....		$12,622.03	
CCA 10	Services Other Than Personal,.....		1,228.00	
11	Transportation of Persons,.....	99.83		
12	Transportation of Things,.....	28.57		
13	Subsistence and Support of Persons,..	46.85		
14	Care of Animals and Vehicles,.....	452.88		
15	Communication Service,.....	214.97		
16	Printing, Engraving, and Binding,....	361.90		
19	Miscellaneous Services,.....	23.00		
CCA 20	Fixed Charges and Contributions,.....		4,042.88	
22	Insurance,.....	12.50		
23	Taxes and Fees,.....	12.00		
26	Damages to Persons and Property,...	18.38		
29	Miscellaneous Fixed Charges,.....	4,000.00		
CCA 30	Supplies,.....		493.21	
31	Office Supplies,.....	179.97		
32	Fuel,.....	149.38		
33	Mechanics' Supplies,.....	144.04		
35	Sewing Supplies,.....	.12		
38	Medical, Surgical, and Laboratory Supplies,.....	16.50		
39	Miscellaneous Supplies,.....	3.20		
CCA 40	Materials,.....		2.47	
42	Metals and Metal Products,.....	2.47		
CCA 50	Equipment and Parts,.....		194.91	
52	Production, Construction, and Conveying Equipment,.....	9.10		
54	Furniture and Furnishings,.....	185.81		
				18,583.50
CCH	ALMSHOUSE.			
CCH 00	Personal Services,.....		$21,084.42	
CCH 10	Services Other Than Personal,.....		6,878.39	
11	Transportation of Persons,.....	16.76		
12	Transportation of Things,.....	76.68		
14	Care of Animals and Vehicles,.....	479.62		
15	Communication Service,.....	35.22		
16	Printing, Engraving, and Binding,....	17.59		
17	Advertising and Publications,.....	52.30		
18	Light, Heat, and Power,.....	478.94		
19	Miscellaneous Services,.....	5,721.28		
CCH 30	Supplies,.....		31,226.57	
31	Office Supplies,.....	$67.75		
32	Fuel,.....	14,187.98		
33	Mechanics' Supplies,.....	622.18		
	Forward,.....		$59,189.38	

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	Forward,.....		$59,189.38	
Code.	CHARITIES, DEPARTMENT OF (Cont.):			
	ALMSHOUSE (Cont.).			
34	Cleaning and Toilet Supplies,.....	$984.18		
35	Wearing Apparel, Sewing Supplies,...	1,549.81		
36	Supplies for Animals,.....	1,120.16		
37	Provisions for Persons,.....	10,701.00		
38	Medical Supplies,.....	1,621.94		
39	Miscellaneous Supplies,.....	371.57		
CCH 40	Materials,.....		422.81	
42	Metals and Metal Products,.....	39.73		
43	Non-Metallic Mineral Products,.....	7.75		
44	Lumber and Wood Products,.....	48.41		
45	Rope, Hemp, etc.,.....	8.60		
46	Paints and Painters' Materials,.....	318.32		
CCH 50	Equipment and Parts,.....		1,848.76	
51	Heat, Light, and Power Equipment,.	433.67		
52	Production, Construction, and Conveying Equipment,.....	300.00		
53	Live Stock,.....	316.00		
54	Furniture and Furnishings,.....	632.09		
55	Property and Life Preserving Equipment,.....	167.00		
			———	$61,460.95
CCR	OUTSIDE RELIEF.			
CCR 20	Fixed Charges and Contributions,.....		$98,681.03	
25	Contributions to Persons and Institutions,.....	98,681.03		
			———	98,681.03
CCW	WAYFARERS' LODGE.			
CCW 00	Personal Services,.....		$2,225.52	
CCW 10	Services Other Than Personal,.....		206.43	
14	Care of Animals and Vehicles,.....	4.25		
15	Communication Service,.....	.15		
16	Printing, Engraving, and Binding,....	71.93		
18	Light, Heat, and Power,.....	62.91		
19	Miscellaneous Services,.....	67.19		
CCW 30	Supplies,.....		4,959.20	
31	Office Supplies,.....	6.50		
32	Fuel,.....	4,783.95		
33	Mechanics' Supplies,.....	16.36		
34	Cleaning and Toilet Supplies,.....	28.26		
37	Provisions for Persons,.....	124.13		
CCW 40	Materials,.....		48.58	
42	Metals and Metal Products,.....	.87		
43	Non-Metallic Mineral Products,.....	1.40		
44	Lumber and Wood Products,.....	1.20		
45	Rope, Hemp, and Twine,.....	8.76		
46	Paints and Painters' Materials,.....	36.05		
49	Miscellaneous Materials,.....	.30		
CCW 50	Equipment and Parts,.....		137.08	
52	Production, Construction, and Conveying Equipment,.....	137.08		
CCW 60	Lands, Structures, etc.,.....		132.00	
64	Excavations and surfacings,.....	132.00		
			———	7,708.81

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Code.				
GA	CITY AUDITOR:			
GA 00	Personal Services,.....		$15,480.05	
GA 10	Services Other Than Personal,.....		1,005.48	
11	Transportation of Persons,.....	$110.49		
13	Subsistence and Support of Persons,..	177.60		
15	Communication Service,.....	54.12		
16	Printing, Engraving, and Binding,....	608.38		
17	Advertising and Publications,.....	11.10		
19	Miscellaneous Services,.....	43.79		
GA 20	Fixed Charges and Contributions,.....		10.00	
23	Taxes and Fees,.....	10.00		
GA 30	Supplies,.....		334.68	
31	Office Supplies,.....	333.73		
34	Cleaning and Toilet Supplies,.....	.95		
GA 50	Equipment and Parts,.....		67.70	
54	Furniture and Furnishings,.....	67.70		
				$16,897.91
GK	CITY CLERK:			
GK 00	Personal Services,.....		$13,266.66	
GK 10	Services Other Than Personal,.....		3,289.51	
15	Communication Service,.....	240.75		
16	Printing, Engraving, and Binding,....	706.60		
17	Advertising and Publications,.....	2.66		
19	Miscellaneous Services,.....	2,289.50		
GK 30	Supplies,.....		237.89	
31	Office Supplies,.....	125.39		
39	Miscellaneous Supplies,.....	112.50		
GK 50	Equipment and Parts,.....		12.50	
54	Furniture and Furnishings,.....	12.50		
				16,756.56
GR	CITY COLLECTOR:			
GR 00	Personal Services,.....		$25,141.87	
GR 10	Services Other Than Personal,.....		6,768.19	
11	Transportation of Persons,.....	67.13		
12	Transportation of Things,.....	9.39		
13	Subsistence and Support of Persons,..	102.19		
15	Communication Service,.....	3,852.79		
16	Printing, Engraving, and Binding,....	904.16		
17	Advertising and Publications,.....	1,409.60		
19	Miscellaneous Services,.....	422.93		
GR 20	Fixed Charges and Contributions,.....		736.80	
21	Rents,.....	4.50		
22	Insurance,.....	653.50		
23	Taxes and Fees,.....	78.80		
GR 30	Supplies,.....		348.66	
31	Office Supplies,.....	348.66		
GR 50	Equipment and Parts,.....		1,007.49	
54	Furniture and Furnishings,.....	1,007.49		
				34,003.01

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Code.				
GC	CITY COUNCIL:			
GC 00	Personal Services,.....		$3,550.97	
GC 10	Services Other Than Personal,.....		3,147.87	
11	Transportation of Persons,.....	$214.11		
13	Subsistence and Support of Persons,..	117.25		
15	Communication Service,.....	122.66		
16	Printing, Engraving, and Binding,....	380.72		
17	Advertising and Publications,.....	264.46		
19	Miscellaneous Services,.....	2,048.67		
GC 20	Fixed Charges and Contributions,.....		416.65	
23	Taxes and Fees,.....	116.65		
29	Miscellaneous Fixed Charges,.....	300.00		
GC 30	Supplies,.....		21.25	
31	Office Supplies,.....	21.25		
				$7,136.74
GP	CITY PLANNING BOARD:			
GP 00	Personal Services,.....		$50.00	
GP 10	Services Other Than Personal,.....		9,141.45	
11	Transportation of Persons,.....	105.70		
13	Subsistence and Support of Persons,..	39.98		
15	Communication Service,.....	23.75		
16	Printing, Engraving, and Binding,....	91.88		
19	Miscellaneous Services,.....	8,880.14		
GP 20	Fixed Charges and Contributions,.....		35.00	
23	Taxes and Fees,.....	35.00		
GP 30	Supplies,.....		9.35	
31	Office Supplies,.....	9.35		
GP 50	Equipment and Parts,.....		50.00	
54	Furniture and Furnishings,.....	50.00		
				9,285.80
GT	CITY TREASURER:			
GT 00	Personal Services,.....		$16,116.62	
GT 10	Services Other Than Personal,.....		1,147.18	
11	Transportation of Persons,.....	109.88		
12	Transportation of Things,.....	1.62		
13	Subsistence and Support of Persons,..	95.08		
15	Communication Service,.....	214.94		
16	Printing, Engraving, and Binding,....	282.26		
19	Miscellaneous Services,.....	443.45		
GT 20	Fixed Charges and Contributions,.....		443.50	
22	Insurance,.....	380.00		
26	Damages to Persons,.....	63.50		
GT 30	Supplies,.....		269.06	
31	Office Supplies,.....	269.06		
GT 50	Equipment and Parts,.....		252.20	
54	Furniture and Furnishings,.....	226.75		
55	Property and Life Preserving Equipment,.....	25.45		
				18,228.56
OH	DAMAGES—LAND:			
OH 60	Lands, Structures, and Capital Outlay,..		$2,088.77	
67	Damages, Awards, and Property Charges,.....	2,088.77		
				2,088.77

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Code.				
OD	DAMAGES—PERSONS AND PROPERTY:			
OD 20	Fixed Charges and Contributions,.....		$4,185.81	
26	Damages to Persons and Property,...	$4,185.81		
				$4,185.81
GV	ELECTIONS:			
GV 00	Personal Services,.....		$8,407.82	
GV 10	Services Other Than Personal,.....		7,907.80	
11	Transportation of Persons,.....	45.33		
12	Transportation of Things,.....	433.60		
15	Communication Service,.....	1.94		
16	Printing, Engraving, and Binding,....	7,082.35		
17	Advertising and Publications,.....	65.52		
19	Miscellaneous Services,.....	279.06		
GV 20	Fixed Charges and Contributions,.....		400.00	
21	Rents,.....	400.00		
GV 30	Supplies,.....		165.45	
31	Office Supplies,.....	111.95		
39	Miscellaneous Supplies,.....	53.50		
GV 40	Materials,.....		1.52	
42	Metal and Metal Products,.....	1.52		
GV 50	Equipment and Parts,.....		199.80	
54	Furniture and Furnishings,.....	199.80		
				17,082.89
PF	FIRE DEPARTMENT:			
PFA	ADMINISTRATION.			
PFA 00	Personal Services,.....		$25,854.96	
PFA 10	Services Other Than Personal,.....		525.03	
11	Transportation of Persons,.....	105.78		
13	Subsistence and Support of Persons,..	56.77		
15	Communication Service,.....	17.45		
16	Printing, Engraving, and Binding,....	312.58		
19	Miscellaneous Services,.....	32.50		
PFA 30	Supplies,.....		99.12	
31	Office Supplies,.....	99.12		
PFA 50	Equipment and Parts,.....		226.48	
54	Furniture and Furnishings,.....	226.48		
				26,705.59
PFF	FIRE ALARM SYSTEM.			
PFF 00	Personal Services,.....		$17,190.81	
PFF 10	Services Other Than Personal,.....		840.27	
11	Transportation of Persons,.....	29.79		
12	Transportation of Things,.....	35.31		
13	Subsistence and Support of Persons,..	6.60		
14	Care of Animals and Vehicles,.....	241.74		
15	Communication Service,.....	6.00		
18	Light, Heat, and Power,.....	176.12		
19	Miscellaneous Services,.....	344.71		
PFF 20	Fixed Charges and Contributions,.....		1,799.24	
24	Pensions,.....	1,799.24		
	Forward,.....		$19,830.32	

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Code.				
	Forward,.....		$19,830.32	
	FIRE DEPARTMENT (Cont.):			
	FIRE ALARM SYSTEM (Cont.).			
PFF 30	Supplies,.....		804.68	
31	Office Supplies,.....	$14.13		
33	Mechanics' Supplies,.....	693.58		
34	Cleaning and Toilet Supplies,.....	6.18		
37	Provisions for Persons,.....	22.11		
38	Medical Supplies,.....	15.94		
39	Miscellaneous Supplies,.....	52.74		
PFF 40	Materials,.....		132.96	
41	Raw Materials,.....	5.16		
42	Metals and Metal Products,.....	49.94		
43	Non-Metallic Mineral Products,.....	.90		
44	Lumber and Wood Products,.....	17.36		
45	Rope, Hemp, and Twine,.....	2.06		
46	Paints and Painters' Materials,.....	57.52		
PFF 50	Equipment and Parts,.....		1,067.60	
51	Light, Heat, and Power Equipment,..	654.06		
52	Production, Construction and Conveying Equipment,.....	361.81		
57	Medical and Laboratory Equipment,..	51.73		
				$21,835.56
PFO	OPERATION.			
PFO 00	Personal Services,.....		$566,952.69	
PFO 10	Services Other Than Personal,.....		13,092.53	
12	Transportation of Things,.....	237.79		
13	Subsistence and Support of Persons,..	8.58		
14	Care of Animals and Vehicles,.....	2,724.20		
15	Communication Service,.....	864.48		
18	Light, Heat, and Power,.....	3,483.96		
19	Miscellaneous Services,.....	5,773.52		
PFO 20	Fixed Charges and Contributions,.....		5,092.45	
23	Taxes and Fees,.....	222.00		
24	Pensions,.....	4,836.45		
26	Damages to Persons and Property,...	34.00		
PFO 30	Supplies,.....		24,636.49	
32	Fuel,.....	16,511.29		
33	Mechanics' Supplies,.....	5,212.05		
34	Cleaning and Toilet Supplies,.....	1,463.41		
35	Wearing Apparel, Sewing Supplies,...	941.66		
37	Provisions for Persons,.....	134.97		
38	Medical, Surgical, and Laboratory Supplies,.....	232.59		
39	Miscellaneous Supplies,.....	90.52		
PFO 40	Materials,.....		1,213.07	
42	Metals and Metal Products,.....	379.86		
43	Non-Metallic Mineral Products,.....	15.28		
44	Lumber and Wood Products,.....	294.68		
45	Rope, Hemp, and Twine,.....	49.14		
46	Paints and Painters' Materials,.....	474.11		
PFO 50	Equipment and Parts,.....		15,371.39	
51	Light, Heat, and Power Equipment,..	75.00		
52	Production, Construction, and Conveying Equipment,.....	8,677.67		
	Forward,.....		$626,358.62	

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	Forward,.....		$626,358.62	
Code.	FIRE DEPARTMENT (Cont.):			
	OPERATION (Cont.).			
54	Furniture and Furnishings,.....	$1,140.93		
55	Property and Life Preserving Equipment,.....	5,477.79		
				$626,358.62
PD	FISH WARDEN:			
PD 00	Personal Services,.....		$25.00	
				25.00
PD	FOREST WARDEN:			
PN 00	Personal Services,.....		$100.00	
				100.00
PH	HEALTH DEPARTMENT:			
PHA	ADMINISTRATION.			
PHA 00	Personal Services,.....		$22,513.71	
PHA 10	Services Other Than Personal,.....		1,557.86	
11	Transportation of Persons,.....	765.58		
12	Transportation of Things,.....	26.83		
13	Subsistence and Support of Persons,..	25.70		
15	Communication Service,.....	293.05		
16	Printing, Engraving, and Binding,....	387.20		
19	Miscellaneous Services,.....	59.50		
PHA 20	Fixed Charges and Contributions,.....		54.00	
23	Taxes and Fees,.....	4.00		
29	Miscellaneous Fixed Charges,.....	50.00		
PHA 30	Supplies,.....		436.91	
31	Office Supplies,.....	169.08		
33	Mechanics' Supplies,.....	.27		
34	Cleaning and Toilet Supplies,.....	1.90		
35	Wearing Apparel, Sewing Supplies,...	.42		
37	Provisions for Persons,.....	37.65		
38	Medical, Surgical, and Laboratory Supplies,.....	226.04		
39	Miscellaneous Supplies,.....	1.55		
PHA 40	Materials,.....		.16	
42	Metals and Metal Products,.....	.16		
PHA 50	Equipment and Parts,.....		96.19	
54	Furniture and Furnishings,.....	96.19		
				24,658.83
PHC	DENTAL CLINIC.			
PHC 00	Personal Services,.....		$5,430.00	
PHC 10	Services Other Than Personal,.....		750.16	
11	Transportation of Persons,.....	100.80		
16	Printing, Engraving, and Binding,....	50.65		
19	Miscellaneous Services,.....	598.71		
PHC 30	Supplies,.....		488.71	
31	Office Supplies,.....	17.05		
33	Mechanics' Supplies,.....	.25		
34	Cleaning and Toilet Supplies,.....	120.18		
35	Wearing Apparel, Sewing Supplies,...	18.00		
37	Provisions for Persons,.....	7.35		
38	Medical Supplies,.....	325.88		
PHC 50	Equipment and Parts,.....		166.28	
54	Furniture and Furnishings,.....	21.28		
57	Medical Supplies,.....	145.00		
				6,835.15

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Code.				
	Health Department (Cont.):			
PHH	**Hospitals.**			
PHH 00	**Personal Services,**		**$15,106.20**	
PHH 10	**Services Other Than Personal,**		**12,341.41**	
11	Transportation of Persons,	$168.00		
12	Transportation of Things,	119.54		
14	Care of Animals,	312.50		
15	Communication Service,	17.55		
16	Printing, Engraving, and Binding,	54.43		
18	Light, Heat, and Power,	9,177.77		
19	Miscellaneous Services,	2,491.62		
PHH 20	**Fixed Charges and Contributions,**		**6,056.32**	
25	Contributions to Persons and Institutions,	6,056.32		
PHH 30	**Supplies,**		**14,602.59**	
31	Office Supplies,	27.19		
32	Fuel,	.47		
33	Mechanics' Supplies,	62.59		
34	Cleaning and Toilet Supplies,	357.13		
35	Wearing Apparel, Sewing Supplies,	397.25		
36	Supplies for Animals,	6.00		
37	Provisions for Persons,	11,852.34		
38	Medical, Surgical, and Laboratory Supplies,	1,668.25		
39	Miscellaneous Supplies,	231.37		
PHH 40	**Materials,**		**227.73**	
42	Metals and Metal Products,	14.58		
43	Non-Metallic Mineral Products,	.60		
44	Lumber and Wood Products,	4.48		
45	Rope, Hemp, and Twine,	2.81		
46	Paints and Painters' Materials,	205.11		
49	Miscellaneous Materials,	.15		
PHH 50	**Equipment and Parts,**		**3,027.32**	
52	Production, Construction, and Conveying Equipment,	2,614.20		
54	Furniture and Furnishings,	387.17		
55	Property and Life Preserving Equipment,	16.15		
57	Medical and Surgical Equipment,	9.80		
				$51,361.57
PHM	**Laboratories and Milk Inspection.**			
PHM 00	**Personal Services,**		**$6,633.16**	
PHM 10	**Services Other Than Personal,**		**775.99**	
11	Transportation of Persons,	159.98		
12	Transportation of Things,	.62		
13	Subsistence and Support of Persons,	83.10		
14	Care of Animals,	111.15		
15	Communication Service,	68.65		
16	Printing, Engraving, and Binding,	92.98		
18	Light, Heat, and Power,	76.05		
19	Miscellaneous Services,	183.51		
	Forward,		**$7,409.15**	

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	Forward,.....			$7,409.15	
Code.	HEALTH DEPARTMENT (Cont.):				
	LABORATORIES AND MILK INSPECTION (Cont.).				
PHM 20	Fixed Charges and Contributions,.....			1,034.00	
21	Rents,.....	$1,020.00			
23	Taxes and Fees,.....	14.00			
PHM 30	Supplies,.....			420.81	
31	Office Supplies,.....	61.41			
32	Fuel,.....	147.08			
33	Mechanics' Supplies,.....	38.69			
34	Cleaning and Toilet Supplies,.....	24.02			
37	Provisions for Persons,.....	46.48			
38	Medical, Surgical, and Laboratory Supplies,.....	99.33			
39	Miscellaneous Supplies,.....	3.85			
PHM 40	Materials,.....			8.53	
42	Metals and Metal Products,.....	8.26			
45	Rope, Hemp, and Twine,.....	.27			
PHM 50	Equipment and Parts,.....			955.09	
52	Production, Construction, and Conveying Equipment,.....	940.21			
54	Furniture and Furnishings,.....	5.63			
57	Medical, Surgical, and Laboratory Equipment,.....	9.25			
					$9,827.58
PHI	MEDICAL INSPECTION OF SCHOOL CHILDREN.				
PHI 00	Personal Services,.....			$20,784.24	
PHI 10	Services Other Than Personal,.....			903.42	
11	Transportation of Persons,.....	626.95			
12	Transportation of Things,.....	1.00			
16	Printing, Engraving, and Binding,....	237.80			
19	Miscellaneous Services,.....	37.67			
PHI 30	Supplies,.....			123.30	
31	Office Supplies,.....	30.65			
35	Wearing Apparel, Sewing Supplies,...	23.49			
38	Medical, Surgical, and Laboratory Supplies,.....	59.16			
39	Miscellaneous Supplies,.....	10.00			
PHI 50	Equipment and Parts,.....			26.18	
54	Furniture and Furnishings,.....	26.18			
					21,837.14
PHD	TUBERCULOSIS DISPENSARY.				
PHD 00	Personal Services,.....			$2,733.27	
PHD 10	Services Other Than Personal,.....			583.69	
11	Transportation of Persons,.....	136.00			
12	Transportation of Things,.....	2.11			
15	Communication Service,.....	8.90			
16	Printing, Engraving, and Binding,....	17.56			
18	Light, Heat, and Power,.....	7.91			
19	Miscellaneous Services,.....	361.21			
PHD 20	Fixed Charges and Contributions,.....			660.00	
21	Rents,.....	660.00			
PHD 30	Supplies,.....			68.58	
31	Office Supplies,.....	6.89			
	Forward,.....			$3,995.54	

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Code.					
	Forward,.....			$3,995.54	
	HEALTH DEPARTMENT (Cont.):				
	TUBERCULOSIS DISPENSARY (Cont.).				
33	Mechanics' Supplies,.....	$2.15			
34	Cleaning and Toilet Supplies,.....	1.14			
38	Medical, Surgical, and Laboratory Supplies,.....	50.50			
39	Miscellaneous Supplies,.....	7.90			
PHD 50	Equipment and Parts,.....			2.37	
54	Furniture and Furnishings,.....	2.37			
					$3,997.91
GL	LAW DEPARTMENT:				
GL 00	Personal Services,.....			$11,249.16	
GL 10	Services Other Than Personal,.....			446.29	
11	Transportation of Persons,.....	28.85			
12	Transportation of Things,.....	4.10			
13	Subsistence and Support of Persons,..	6.65			
15	Communication Service,.....	56.80			
16	Printing, Engraving, and Binding,....	229.48			
19	Miscellaneous Services,.....	125.41			
GL 20	Fixed Charges and Contributions,.....			139.00	
23	Taxes and Fees,.....	89.00			
29	Miscellaneous Fixed Charges,.....	50.00			
GL 30	Supplies,.....			115.03	
31	Office Supplies,.....	115.03			
GL 50	Equipment and Parts,.....			287.19	
54	Furniture and Furnishings,.....	287.19			
					12,236.67
GI	LICENSE COMMISSIONERS, BOARD OF:				
GI 00	Personal Services,.....			$560.00	
GI 10	Services Other Than Personal,.....			98.54	
15	Communication Service,.....	10.75			
16	Printing, Engraving, and Binding,....	66.05			
17	Advertising and Publications,.....	21.74			
GI 20	Fixed Charges and Contributions,.....			25.00	
29	Miscellaneous Fixed Charges,.....	25.00			
					683.54
GM	MAYOR:				
GM 00	Personal Services,.....			$8,178.52	
GM 10	Services Other Than Personal,.....			839.09	
11	Transportation of Persons,.....	91.07			
13	Subsistence and Support of Persons,..	98.60			
14	Care of Animals and Vehicles,.....	135.93			
15	Communication Service,.....	76.22			
16	Printing, Engraving, and Binding,....	232.47			
19	Miscellaneous Services,.....	204.80			
GM 20	Fixed Charges and Contributions,.....			15.00	
23	Taxes and Fees,.....	15.00			
GM 30	Supplies,.....			646.02	
31	Office Supplies,.....	62.00			
32	Fuel,.....	261.24			
33	Mechanics' Supplies,.....	322.78			
GM 50	Equipment and Parts,.....			200.00	
54	Furniture and Furnishings,.....	200.00			
					9,878.63

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Code.				
DD	MUNICIPAL DEBT:			
DD	PRINCIPAL,.....		$464,500.00	
DDA	City Debt Serials,.....	$436,500.00		
DDC	Sinking Funds,.....	28,000.00		
DI	INTEREST,.....		470,387.54	
DIA	City Debt,.....	344,778.75		
DIC	Temporary Loans,.....	123,011.42		
DID	Trust Funds,.....	179.69		
	State Tax,.....	2,417.68		
				$934,887.54
PP	POLICE DEPARTMENT:			
PP 00	Personal Services,.....		$389,986.20	
PP 10	Services Other Than Personal,.....		16,390.40	
11	Transportation of Persons,.....	1,366.15		
12	Transportation of Things,.....	64.67		
13	Subsistence and Support of Persons,..	1,631.77		
14	Care of Animals and Vehicles,.....	2,211.74		
15	Communication Service,.....	2,362.50		
16	Printing, Engraving, and Binding,....	1,448.59		
17	Advertising and Publications,.....	136.05		
18	Light, Heat, and Power,.....	3,809.06		
19	Miscellaneous Services,.....	3,359.87		
PP 20	Fixed Charges and Contributions,.....		11,885.68	
21	Rents,.....	8.00		
22	Insurance,.....	17.50		
23	Taxes and Fees,.....	83.50		
24	Pensions,.....	11,161.68		
26	Damages to Persons and Property,...	15.00		
29	Miscellaneous Services,.....	600.00		
PP 30	Supplies, ...		21,589.10	
31	Office Supplies,.....	1,282.02		
32	Fuel,.....	2,148.18		
33	Mechanics' Supplies,.....	1,804.53		
34	Cleaning and Toilet Supplies,.....	774.72		
35	Wearing Apparel, Sewing Supplies,...	14,380.63		
37	Provisions for Persons,.....	129.72		
38	Medical, Surgical, and Laboratory Supplies,.....	46.53		
39	Miscellaneous Supplies,.....	1,072.77		
PP 40	Materials,.....		39.89	
44	Lumber and Wood Products,.....	21.91		
45	Rope, Hemp, and Twine,.....	6.98		
46	Paints and Painters' Materials,.....	11.05		
PP 50	Equipment and Parts,.....		9,451.66	
51	Light, Heat, and Power Equipment,..	916.75		
52	Production, Construction, and Conveying Equipment,.....	6,383.21		
54	Furniture and Furnishings,.....	1,084.15		
55	Property and Fire Preserving Equipment,.....	175.00		
59	Miscellaneous Equipment,.....	942.55		
				449,342.98

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Code.				
GY	PRINTING, COMMITTEE ON:			
GY 00	Personal Services,.....		$750.00	
GY 10	Services Other Than Personal,.....		5,263.61	
12	Transportation of Things,.....	$6.24		
15	Communication Service,.....	4.45		
16	Printing, Engraving, and Binding,....	5,050.77		
19	Miscellaneous Services,.....	202.15		
GY 30	Supplies,.....		$93.10	
31	Office Supplies,.....	93.10		
				$6,106.71
WB	PUBLIC BUILDINGS, DEPARTMENT OF:			
WBA	ADMINISTRATION.			
WBA 00	Personal Services,.....		$9,246.58	
WBA 10	Services Other Than Personal,.....		429.39	
11	Transportation of Persons,.....	35.60		
13	Subsistence and Support of Persons,..	4.90		
15	Communication Service,.....	211.47		
16	Printing, Engraving, and Binding,....	134.34		
17	Advertising and Publications,.....	21.63		
19	Miscellaneous Services,.....	21.45		
WBA 20	Fixed Charges and Contributions,.....		100.00	
29	Miscellaneous Fixed Charges	100.00		
WBA 30	Supplies,.....		108.36	
31	Office Supplies,.....	108.36		
WBA 50	Equipment and Parts,.....		350.00	
54	Furniture and Furnishings,.....	350.00		
				10,234.33
WBR	MILITIA RIFLE RANGE.			
WBR 00	Personal Services,.....		$1,142.77	
WBR 10	Services Other Than Personal,.....		36.50	
12	Transportation of Things,.....	1.70		
19	Miscellaneous Services,.....	34.80		
WBR 20	Fixed Charges and Contributions,.....		222.55	
22	Insurance,.....	30.00		
23	Taxes and Fees,.....	192.55		
WBR 30	Supplies,.....		2.22	
33	Mechanics' Supplies,.....	1.52		
34	Cleaning and Toilet Supplies,.....	.70		
WBR 40	Materials,.....		771.13	
42	Metals and Metal Products,.....	12.42		
43	Non-Metallic Mineral Products,.....	25.75		
44	Lumber and Wood Products,.....	117.66		
47	Electrical Materials,.....	615.30		
WBR 50	Equipment and Parts,.....		302.40	
51	Light, Heat, and Power Equipment,..	302.40		
				2,477.57
WBG	MUNICIPAL GROUP BUILDINGS.			
WBG 00	Personal Services,.....		$44,456.27	
WBG 10	Services Other Than Personal,.....		15,812.66	
12	Transportation of Things,.....	90.81		
15	Communication Service,.....	1,316.05		
	Forward,.....		$60,268.93	

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Code.				
	Forward,.....		$60,268.93	
	PUBLIC BUILDINGS, DEPARTMENT OF (Cont.):			
	MUNICIPAL GROUP BUILDING (Cont.).			
16	Printing, Engraving, and Binding,....	$10.85		
18	Light, Heat, and Power,.....	5,510.58		
19	Miscellaneous Services,.....	8,884.37		
WBG 30	Supplies,.....		3,847.66	
32	Fuel,.....	1.90		
33	Mechanics' Supplies,.....	174.69		
34	Cleaning and Toilet Supplies,.....	3,055.17		
35	Wearing Apparel, Sewing Supplies,...	40.00		
37	Medical, Surgical, and Laboratory Supplies,.....	556.00		
39	Miscellaneous Supplies,.....	19.90		
WBG 40	Materials,.....		2,464.61	
41	Raw Materials,.....	12.00		
42	Metals and Metal Products,.....	411.24		
43	Non-Metallic Mineral Products,.....	184.67		
44	Lumber and Wood Products,.....	438.48		
45	Rope, Hemp, and Twine,.....	1.50		
46	Paints and Painters' Materials,.....	181.75		
47	Electrical Materials,.....	1,218.08		
49	Miscellaneous Materials,.....	16.94		
WBG 50	Equipment and Parts,.....		1,998.06	
51	Heat, Light and Power Equipment,..	105.36		
52	Production, Construction, and Conveying Equipment,.....	8.75		
54	Furniture and Furnishings,.....	1,879.60		
56	Educational and Recreational Equipment,.....	4.35		
				$68,579.26
WBH	MUNICIPAL HEATING PLANT.			
WBH 00	Personal Services,.....		$11,363.11	
WBH 10	Services Other Than Personal,.....		633.65	
12	Transportation of Things,.....	14.88		
15	Communication Service,.....	.20		
18	Light, Heat, and Power,.....	176.16		
19	Miscellaneous Services,.....	442.41		
WBH 30	Supplies,.....		8,155.37	
32	Fuel,.....	7,319.33		
33	Mechanics' Supplies,.....	657.16		
34	Cleaning and Toilet Supplies,.....	169.58		
37	Provisions for Persons,.....	8.30		
WBH 40	Materials,.....		76.35	
42	Metals and Metal Products,.....	57.30		
43	Non-Metallic Mineral Products,.....	4.50		
46	Paints and Painters' Materials,.....	14.51		
47	Electrical Materials,.....	.54		
WBH 50	Equipment and Parts,.....		277.61	
52	Production, Construction, and Conveying Equipment,.....	277.61		
				20,506.59

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Code.		PUBLIC BUILDINGS, DEPARTMENT OF (Cont.):			
WBO		MUNICIPAL ORGAN CONCERTS.			
WBO	00	Personal Services,.....		$290.00	
WBO	10	Services Other Than Personal,.....		65.26	
	16	Printing, Engraving, and Binding,....	$46.50		
	17	Advertising and Publications,.....	18.76		
					$355.26
WBSM		SCHOOLS—MAINTENANCE.			
WBSM	00	Personal Services,.....		$49,786.80	
WBSM	10	Services Other Than Personal,.....		20,961.06	
	11	Transportation of Persons,.....	474.18		
	12	Transportation of Things,.....	88.25		
	19	Miscellaneous Services,.....	20,448.68		
WBSM	30	Supplies,.....		528.02	
	33	Mechanics' Supplies,.....	488.42		
	35	Wearing Apparel, Sewing Supplies,...	22.60		
	39	Miscellaneous Supplies,.....	17.00		
WBSM	40	Materials,.....		18,602.51	
	41	Raw Materials,.....	184.20		
	42	Metals and Metal Products,.....	4,586.91		
	43	Non-Metallic Mineral Products,.....	1,003.01		
	44	Lumber and Wood Products,.....	3,296.14		
	45	Rope, Hemp, and Twine,.....	42.95		
	46	Paints and Painters' Materials,.....	4,674.33		
	47	Electrical Materials,.....	4,806.44		
	49	Miscellaneous Materials,.....	8.53		
WBSM	50	Equipment and Parts,.....		10,021.32	
	51	Light, Heat, and Power Equipment,..	4,259.14		
	52	Production, Construction, and Conveying Equipment,.....	565.67		
	54	Furniture and Furnishings,.....	4,988.59		
	55	Property and Life Preserving Equipment,.....	43.92		
	56	Educational and Recreational Equipment,.....	164.00		
					99,849.21
WBSO		SCHOOLS—OPERATION.			
WBSO	00	Personal Services,.....		$163,594.50	
WBSO	10	Services Other Than Personal,.....		26,783.20	
	12	Transportation of Things,.....	434.25		
	14	Care of Animals and Vehicles,.....	154.64		
	18	Light, Heat, and Power,.....	20,250.11		
	19	Miscellaneous Services,.....	5,944.20		
WBSO	20	Fixed Charges and Contributions,.....		761.50	
	22	Insurance,.....	50.20		
	23	Taxes and Fees,.....	89.90		
	24	Pensions,.....	621.40		
WBSO	30	Supplies,.....		91,740.93	
	32	Fuel,.....	86,463.27		
	33	Mechanics' Supplies,.....	1,350.96		
	34	Cleaning and Toilet Supplies,.....	3,585.73		
	37	Provisions for Persons,.....	10.90		
	38	Medical, Surgical, and Laboratory Supplies,.....	.50		
	39	Miscellaneous Supplies,.....	379.57		
		Forward,.....		$282,880.13	

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	Forward,.....		$282,880.13	
Code.	PUBLIC BUILDINGS, DEPARTMENT OF (Cont.): SCHOOLS—OPERATION (Cont.).			
WBSO 50	Equipment and Parts,.....		200.58	
52	Production, Construction, and Conveying Equipment,.....	$91.13		
54	Furniture and Furnishings,.....	41.95		
55	Property and Life Preserving Equipment,.....	67.50		
			———	$283,080.71
WB 215	STORES,.....			3,467.83
EL	PUBLIC LIBRARY:			
EL 20	Fixed Charges and Contributions,.....		$137,737.00	
25	Contributions to Persons and Institutions,.....	137,737.00		
			———	137,737.00
RP	PUBLIC PARKS, DEPARTMENT OF:			
RPA	ADMINISTRATION.			
RPA 00	Personal Services,.....		$31,881.42	
RPA 10	Services Other Than Personal,.....		440.97	
15	Communication Service,.....	309.16		
16	Printing, Engraving, and Binding,....	131.81		
RPA 30	Supplies,.....		108.03	
31	Office Supplies,.....	108.03		
			———	32,430.42
RPO	OPERATION.			
RPO 00	Personal Services,.....		$157,367.00	
RPO 10	Services Other Than Personal,.....		5,076.89	
12	Transportation of Things,.....	845.39		
14	Care of Animals and Vehicles,.....	534.19		
16	Printing, Engraving, and Binding,....	41.56		
18	Light, Heat, and Power,.....	273.85		
19	Miscellaneous Services,.....	3,381.90		
RPO 20	Fixed Charges and Contributions,.....		446.95	
21	Rents,.....	212.00		
22	Insurance,.....	60.50		
23	Taxes and Fees,.....	49.35		
24	Pensions,.....	125.10		
RPO 30	Supplies,.....		23,073.20	
32	Fuel,.....	6,572.59		
33	Mechanics' Supplies,.....	4,169.62		
34	Cleaning and Toilet Supplies,.....	445.15		
35	Wearing Apparel, Sewing Supplies,...	611.68		
36	Supplies for Animals,.....	7,327.46		
37	Provisions for Persons,.....	409.60		
37	Medical, Surgical, and Laboratory Supplies,.....	111.08		
39	Miscellaneous Supplies,.....	3,426.02		
RPO 40	Materials,.....		13,869.56	
41	Raw Materials,.....	1,691.79		
42	Metals and Metal Products,.....	3,526.86		
43	Non-Metallic Mineral Products,.....	3,950.46		
44	Lumber and Wood Products,.....	1,785.69		
45	Rope, Hemp, and Twine,.....	986.37		
	Forward,.....		$199,833.60	

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Code.				
	Forward,.....		$199,833.60	
	PUBLIC PARKS, DEPARTMENT OF (Cont.): OPERATION (Cont.).			
46	Paints and Painters' Materials,.....	$1,809.93		
49	Miscellaneous Materials,.....	168.46		
RPO 50	Equipment and Parts,.....		13,521.70	
51	Light, Heat, and Power Equipment,...	23.24		
52	Construction and Conveying Equipment,.....	11,229.08		
54	Furniture and Furnishings,.....	257.60		
55	Property and Life Preserving Equipment,.....	2,011.78		
			———	$213,355.30
GW	PUBLIC WORKS, BOARD OF:			
GW 00	Personal Services,.....		$1,756.00	
GW 10	Services Other Than Personal,.....		194.42	
11	Transportation of Persons,.....	136.26		
16	Printing, Engraving, and Binding,....	18.01		
17	Advertising and Publications,.....	28.80		
19	Miscellaneous Services,.....	11.35		
GW 30	Supplies,.....		64.58	
31	Office Supplies,.....	64.58		
GW 50	Equipment and Parts,.....		147.20	
54	Furniture and Furnishings,.....	147.20		
			———	2,162.20
OA	REFUNDS:			
OA 90	Miscellaneous Items,.....		$3,973.52	
	Auditorium Rentals,.....	319.00		
	Corporation Taxes,.....	462.40		
	Hospital, Health Department,.....	177.14		
	Licenses,.....	26.60		
	Real Estate, Taxes,.....	177.75		
	Streets and Engineering, Department of. Miscellaneous,.....	40.76		
	Sewer Fees,.....	2,000.46		
	Tuition, Schools,.....	769.41		
			———	3,973.52
OC	RESERVE FOR CONTINGENCIES:			
	Sundry Transfers,.....		$368,562.70	
	Almshouse Addition,.....	6,500.00		
	Assessors,.....	5,000.00		
	Berkshire Avenue Bridge,.....	500.00		
	Building Department,.....	2,300.00		
	Celebrations,.....	4,192.50		
	Charities Department,.....	36,200.00		
	City Council,.....	3,200.00		
	City Planning Board,.....	21,000.00		
	City Treasurer,.....	300.00		
	Committee on Transportation,.....	450.00		
	Damages to Persons and Property,...	1,000.00		
	Fire Department,.....	6,385.00		
	Forest Park Extension,.....	10,000.00		
	Health Department,.....	2,500.00		
	Hooker School, Public Sanitary,.....	9,000.00		

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	RESERVE FOR CONTINGENCIES (Cont.):			
	Sundry Transfers (Cont.).			
	Interest, Temporary Loans,	$37,582.32		
	Interest, State Tax,	2,417.68		
	Land for Schoolhouse Purposes,	14,500.00		
	National Bank Tax,	4.45		
	Police Department,	3,700.00		
	Public Buildings,	21,400.00		
	Public Parks,	10,868.00		
	Pynchon Street Schoolhouse Removal,	13,000.00		
	School Department,	18,792.75		
	Soldiers' Relief Commissioner,	17,870.00		
	South End Bridge Repairs,	50,000.00		
	Springfield and West Springfield Bridge,	14,000.00		
	State Street Junior High School,	10,000.00		
	Unemployment Relief,	25,000.00		
	Veterans' Headquarters,	400.00		
	Vocational School,	16,000.00		
	Workmen's Compensation,	5,000.00		
				$368,562.70
Code.				
ES	SCHOOL DEPARTMENT:			
ESA	ADMINISTRATION.			
ESA 00	Personal Services,		$32,070.37	
ESA 10	Services Other Than Personal,		7,214.06	
11	Transportation of Persons,	319.90		
12	Transportation of Things,	3,781.31		
13	Subsistence and Support of Persons,	200.45		
14	Care of Animals and Vehicles,	250.00		
15	Communication Service,	978.04		
16	Printing, Engraving, and Binding,	1,440.01		
19	Miscellaneous Services,	243.85		
ESA 20	Fixed Charges and Contributions,		302.00	
21	Rents,	2.00		
29	Miscellaneous Fixed Charges,	300.00		
ESA 30	Supplies,		672.52	
31	Office and Educational Supplies,	651.11		
34	Cleaning and Toilet Supplies,	4.86		
37	Provisions for Persons,	9.70		
38	Medical, Surgical, and Laboratory Supplies,	4.50		
39	Miscellaneous Supplies,	2.35		
ESA 40	Materials,		.30	
44	Lumber and Wood Products,	.30		
ESA 50	Equipment and Parts,		319.67	
54	Furniture and Furnishings,	54.38		
56	Educational and Recreational Equipment,	265.29		
				40,578.92
ESC	CENTRAL HIGH SCHOOL.			
ESC 00	Personal Services,		$119,708.81	
ESC 10	Services Other Than Personal,		1,256.70	
11	Transportation of Persons,	44.40		
12	Transportation of Things,	84.34		
13	Subsistence and Support of Persons,	37.44		
15	Communication Service,	56.32		
	Forward,		$120,965.51	

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Code.				
	Forward,		$120,965.51	
	SCHOOL DEPARTMENT (Cont.):			
	CENTRAL HIGH SCHOOL (Cont.).			
16	Printing, Engraving, and Binding,	$761.99		
19	Miscellaneous Services,	272.21		
ESC 20	Fixed Charges and Contributions,		75.00	
21	Rents,	75.00		
ESC 30	Supplies,		5,268.57	
31	Office and Educational Supplies,	4,206.48		
33	Mechanics' Supplies,	15.06		
34	Cleaning and Toilet Supplies,	288.71		
35	Wearing Apparel, Sewing Supplies,	127.91		
37	Provisions for Persons,	52.15		
38	Medical, Surgical, and Laboratory Supplies,	556.99		
39	Miscellaneous Supplies,	21.32		
ESC 40	Materials,		48.21	
42	Metals and Metal Products,	14.46		
44	Lumber and Wood Products,	8.20		
46	Paints and Painters' Materials,	30.55		
ESC 50	Equipment and Parts,		1,099.21	
51	Light, Heat, and Power Equipment,	33.60		
52	Production, Construction, and Conveying Equipment,	26.58		
54	Furniture and Furnishings,	72.75		
56	Educational and Recreational Equipment,	966.28		
				$127,456.50
ESCS	CONTINUATION SCHOOL.			
ESCS 00	Personal Services,		$29,656.31	
ESCS 10	Services Other Than Personal,		1,183.61	
11	Transportation of Persons,	600.79		
12	Transportation of Things,	273.21		
13	Subsistence and Support of Persons,	20.05		
15	Communication Service,	238.58		
19	Miscellaneous Services,	50.98		
ESCS 30	Supplies,		1,361.48	
31	Office and Educational Supplies,	856.78		
33	Mechanics' Supplies,	130.23		
34	Cleaning and Toilet Supplies,	13.38		
35	Wearing Apparel, Sewing Supplies,	159.37		
37	Provisions for Persons,	62.52		
38	Medical, Surgical, and Laboratory Supplies,	128.87		
39	Miscellaneous Supplies,	10.33		
ESCS 40	Materials,		1,070.98	
42	Metals and Metal Products,	476.01		
44	Lumber and Wood Products,	533.98		
46	Paints and Painters' Materials,	60.99		
ESCS 50	Equipment and Parts,		13,171.05	
51	Light, Heat, and Power Equipment,	195.00		
52	Production, Construction, and Conveying Equipment,	9,725.64		
54	Furniture and Furnishings,	2,011.85		
56	Educational and Recreational Equipment,	1,238.56		46,443.38

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Code.				
ESEG	**Evening Schools—Elementary.**			
ESEG 00	**Personal Services,**		$18,818.01	
ESEG 10	**Services Other Than Personal,**		698.09	
11	Transportation of Persons,	$13.01		
12	Transportation of Things,	27.71		
13	Subsistence and Support of Persons,	8.25		
15	Communication Service,	5.00		
16	Printing, Engraving, and Binding,	40.58		
17	Advertising and Publications,	24.60		
19	Miscellaneous Services,	578.94		
ESEG 30	**Supplies,**		927.03	
31	Office and Educational Supplies,	916.43		
37	Provisions for Persons,	10.60		
ESEG 50	**Equipment and Parts,**		58.00	
51	Light, Heat, and Power Equipment,	58.00		
				$20,501.13
ESEH	**Evening Schools—High.**			
ESEH 00	**Personal Services,**		$9,384.50	
ESEH 10	**Services Other Than Personal,**		200.60	
12	Transportation of Things,	7.25		
15	Communication Service,	11.00		
16	Printing, Engraving, and Binding,	92.75		
17	Advertising and Publications,	24.60		
19	Miscellaneous Services,	65.00		
ESEH 30	**Supplies,**		1,045.36	
31	Office and Educational Supplies,	1,011.63		
38	Medical, Surgical, and Laboratory Supplies,	33.73		
				10,630.46
ESTR	**Evening Schools—Trades.**			
ESTR 00	**Personal Services,**		$9,547.95	
ESTR 10	**Services Other Than Personal,**		74.37	
12	Transportation of Things,	5.36		
16	Printing, Engraving, and Binding,	44.41		
17	Advertising and Publications,	24.60		
ESTR 30	**Supplies,**		511.88	
31	Office and Educational Supplies,	8.00		
33	Mechanics' Supplies,	208.47		
34	Cleaning and Toilet Supplies,	154.64		
35	Wearing Apparel, Sewing Supplies,	125.69		
38	Medical, Surgical, and Laboratory Supplies,	10.28		
39	Miscellaneous Supplies,	4.80		
ESTR 40	**Materials,**		284.41	
41	Raw Materials,	17.50		
42	Metals and Metal Products,	203.58		
44	Lumber and Wood Products,	42.33		
47	Electrical Materials,	21.00		
ESTR 50	**Equipment and Parts**		410.49	
52	Production, Construction, and Conveying Equipment,	389.99		
54	Furniture and Furnishings,	20.50		
				10,829.10

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Code.				
ESEV	**Evening Schools—Vocational.**			
ESEV 00	Personal Services,.....		$1,236.54	
ESEV 10	Services Other Than Personal,.....		20.30	
17	Advertising and Publications,.....	$20.30		
ESEV 20	Fixed Charges and Contributions,.....		46.88	
29	Miscellaneous Fixed Charges,.....	46.88		
ESEV 40	Materials,.....		64.01	
42	Metals and Metal Products,.....	7.08		
44	Lumber and Wood Products,.....	56.93		
				$1,367.73
ESG	**Graded Schools and Junior High.**			
ESG 00	Personal Services,.....		$1,061,415.08	
ESG 10	Services Other Than Personal,.....		14,691.18	
11	Transportation of Persons,.....	5,667.94		
12	Transportation of Things,.....	915.05		
13	Subsistence and Support of Persons,..	2,537.18		
15	Communication Service,.....	1,364.84		
16	Printing, Engraving, and Binding,....	2,857.84		
19	Miscellaneous Services,.....	1,348.33		
ESG 20	Fixed Charges and Contributions,.....		125.00	
21	Rents,.....	125.00		
ESG 30	Supplies,.....		63,770.79	
31	Office and Educational Supplies,.....	52,410.49		
33	Mechanics' Supplies,.....	196.31		
34	Cleaning and Toilet Supplies,.....	2,245.96		
35	Wearing Apparel, Sewing Supplies,...	1,201.45		
37	Provisions for Persons,.....	6,404.85		
38	Medical, Surgical, and Laboratory Supplies,.....	126.71		
39	Miscellaneous Supplies,.....	1,185.02		
ESG 40	Materials,.....		5,319.83	
41	Raw Materials,.....	36.41		
42	Metals and Metal Products,.....	724.91		
43	Non-Metallic Mineral Products,.....	103.78		
44	Lumber and Wood Products,.....	3,999.69		
46	Paints and Painters' Materials,.....	455.04		
ESG 50	Equipment and Parts,.....		6,043.35	
51	Light, Heat, and Power Equipment,..	1.35		
52	Production, Construction, and Conveying Equipment,.....	512.41		
54	Furniture and Furnishings,.....	2,582.09		
56	Educational and Recreational Equipment,.....	2,947.50		
				1,151,365.22
ESGL	**Graded Schools Lunches.**			
ESGL 00	Personal Services,.....		$576.00	
ESGL 10	Services Other Than Personal,.....		13.69	
19	Miscellaneous Services,.....	13.69		
ESGL 30	Supplies,.....		992.43	
37	Provisions for Persons,.....	982.28		
39	Miscellaneous Supplies,.....	10.15		
ESGL 50	Equipment and Parts,.....		86.33	
54	Furniture and Furnishings,.....	86.33		
				1,668.45

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Code.				
ESH	High School of Commerce.			
ESH 00	Personal Services,.....		$128,334.38	
ESH 10	Services Other Than Personal,.....		3,315.40	
11	Transportation of Persons,.....	$17.68		
12	Transportation of Things,.....	159.68		
13	Subsistence and Support of Persons,..	22.68		
15	Communication Service,.....	48.49		
16	Printing, Engraving, and Binding,....	757.82		
17	Advertising and Publications,.....	59.26		
19	Miscellaneous Services,.....	2,249.89		
ESH 20	Fixed Charges and Contributions,.....		75.00	
21	Rents,.....	75.00		
ESH 30	Supplies,.....		8,427.40	
31	Office and Educational Supplies,.....	6,672.33		
33	Mechanics' Supplies,.....	15.31		
34	Cleaning and Toilet Supplies,.....	550.53		
35	Wearing Apparel, Sewing Supplies,...	127.14		
37	Provisions for Persons,.....	786.42		
38	Medical, Surgical, and Laboratory Supplies,.....	196.73		
39	Miscellaneous Supplies,.....	78.94		
ESH 40	Materials,.....		285.17	
42	Metals and Metal Products,.....	62.11		
44	Lumber and Wood Products,.....	161.67		
46	Paints and Painters' Materials,.....	11.39		
ESH 50	Equipment and Parts, ...		2,146.66	
52	Production, Construction, and Conveying Equipment,.....	38.45		
54	Furniture and Furnishings,.....	1,739.18		
56	Educational and Recreational Equipment,.....	369.03		
			———	142,534.01
ESL	High Schools Lunches.			
ESL 00	Personal Services,.....		$14,520.61	
ESL 10	Services Other Than Personal.....		603.55	
11	Transportation of Persons,.....	69.30		
12	Transportation of Things,.....	83.27		
15	Communication Service,.....	4.65		
16	Printing, Engraving, and Binding,....	23.50		
17	Advertising and Publications,.....	3.02		
19	Miscellaneous Services,.....	419.81		
ESL 20	Fixed Charges and Contributions,....		1,350.00	
29	Miscellaneous Fixed Charges,.....	1,350.00		
ESL 30	Supplies,.....		39,025.60	
31	Office and Educational Supplies,.....	130.36		
33	Mechanics' Supplies,.....	22.58		
34	Cleaning and Toilet Supplies,.....	226.14		
35	Wearing Apparel, Sewing Supplies,...	16.38		
37	Provisions for Persons,.....	38,384.27		
39	Miscellaneous Supplies,.....	245.37		
ESL 50	Equipment and Parts,.....		4,226.48	
51	Heat, Light, and Power Equipment,..	72.43		
54	Furniture and Furnishings,.....	4,154.05		
			———	59,726.24

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Code.				
ESK	KINDERGARTENS.			
ESK 00	Personal Services,.....		$74,645.23	
ESK 10	Services Other Than Personal,.....		85.55	
12	Transportation of Things,.....	$68.55		
19	Miscellaneous Services,.....	17.00		
ESK 20	Fixed Charges and Contributions,.....		51.00	
25	Contributions to Persons and Institutions,.....	51.00		
ESK 30	Supplies,.....		1,292.89	
31	Office and Educational Supplies,.....	1,174.27		
35	Wearing Apparel, Sewing Supplies,...	12.49		
39	Miscellaneous Supplies,.....	106.13		
ESK 40	Materials,.....		24.05	
44	Lumber and Wood Products,.....	22.50		
46	Paints and Painters' Materials,.....	1.55		
ESK 50	Equipment and Parts,.....		990.71	
54	Furniture and Furnishings,.....	990.71		
				$77,089.43
EST	TECHNICAL HIGH SCHOOL.			
EST 00	Personal Services,.....		$133,455.37	
EST 10	Services Other Than Personal,.....		1,961.67	
11	Transportation of Persons,.....	66.59		
12	Transportation of Things,.....	155.98		
13	Subsistence and Support of Persons,..	29.88		
15	Communication Service,.....	111.40		
16	Printing, Engraving, and Binding,....	953.50		
19	Miscellaneous Services,.....	644.32		
EST 20	Fixed Charges and Contributions,.....		75.00	
21	Rents,.....	75.00		
EST 30	Supplies,.....		8,159.76	
31	Office and Educational Supplies,.....	6,085.84		
32	Fuel,.....	128.00		
33	Mechanics' Supplies,.....	386.08		
34	Cleaning and Toilet Supplies,.....	425.06		
35	Wearing Apparel, Sewing Supplies,...	141.24		
37	Provisions for Persons,.....	356.30		
38	Medical, Surgical, and Laboratory Supplies,.....	592.01		
39	Miscellaneous Supplies,.....	45.23		
EST 40	Materials,.....		1,676.17	
41	Raw Materials,.....	17.50		
42	Metals and Metal Products,.....	864.10		
43	Non-Metallic Mineral Products,.....	47.88		
44	Lumber and Wood Products,.....	653.96		
46	Paints and Painters' Materials,.....	92.73		
EST 50	Equipment and Parts,.....		1,742.99	
51	Light, Heat, and Power Equipment,..	76.54		
52	Production, Construction, and Conveying Equipment,.....	496.56		
54	Furniture and Furnishings,.....	44.50		
56	Educational and Recreational Equipment,.....	1,125.39		
				147,070.96

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Code.				
ESV	VOCATIONAL SCHOOL.			
ESV 00	Personal Services,.....		$32,225.68	
ESV 10	Services Other Than Personal,.....		684.62	
11	Transportation of Persons,.....	$287.62		
12	Transportation of Things,.....	121.74		
13	Subsistence and Support of Persons,..	32.25		
15	Communication Service,.....	51.47		
19	Miscellaneous Services,.....	191.54		
ESV 30	Supplies,.....		1,727.56	
31	Office and Educational Supplies,.....	804.90		
33	Mechanics' Supplies,.....	406.31		
34	Cleaning and Toilet Supplies,.....	431.47		
37	Provisions for Persons,.....	20.68		
39	Miscellaneous Supplies,.....	64.20		
ESV 40	Materials,.....		2,160.14	
41	Raw Materials,.....	2.12		
42	Metals and Metal Products,.....	784.62		
44	Lumber and Wood Products,.....	1,188.61		
46	Paints and Painters' Products,.....	184.79		
ESV 50	Equipment and Parts,.....		1,632.61	
51	Light, Heat, and Power Equipment,..	63.38		
52	Production, Construction, and Conveying Equipment,.....	1,234.79		
54	Furniture and Furnishings,.....	.98		
56	Educational and Recreational Equipment,.....	333.46		
				$38,430.61
ESVS	SUMMER SCHOOL—VOCATIONAL.			
ESVS 00	Personal Services,.....		$2,703.75	
ESVS 10	Services Other Than Personal,.....		20.13	
12	Transportation of Things,.....	8.63		
19	Miscellaneous Services,.....	11.50		
ESVS 30	Supplies,.....		136.30	
31	Office and Educational Supplies,.....	91.86		
33	Mechanics' Supplies,.....	44.44		
ESVS 40	Materials,.....		375.10	
42	Metals and Metal Products,.....	199.10		
44	Lumber and Wood Products,.....	174.87		
46	Paints and Painters' Materials,.....	1.13		
				3,235.28
PS	SMOKE INSPECTOR:			
PS 00	Personal Services,.....		$300.00	
PS 10	Services Other Than Personal,.....		108.89	
15	Communication Service,.....	7.39		
16	Printing, Engraving, and Binding,....	16.75		
19	Miscellaneous Services,.....	84.75		
PS 30	Supplies,.....		10.00	
31	Office Supplies,.....	10.00		
				418.89
SA	SOLDIERS' RELIEF COMMISSIONER:			
SA 00	Personal Services,.....		$3,057.32	
SA 10	Services Other Than Personal,.....		434.36	
	Forward,.....		$3,491.68	

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Code.				
	Forward,.....		$3,491.68	
	SOLDIERS' RELIEF COMMISSIONER (Cont.):			
11	Transportation of Persons,.....	$16.10		
15	Communication Service,.....	35.70		
16	Printing, Engraving, and Binding,....	37.56		
19	Miscellaneous Services,.....	345.00		
SA 20	Fixed Charges and Contributions,.....		36,762.98	
25	Contributions to Persons and Institutions,.....	36,762.98		
SA 30	Supplies,.....		34.14	
31	Office Supplies,.....	34.14		
				$40,288.80
SC	SOLDIERS' AND SAILORS' GRAVES, CARE OF:			
SC 00	Personal Services,.....		$200.00	
SC 10	Services Other Than Personal,.....		676.00	
19	Miscellaneous Services,.....	676.00		
				876.00
WS	STREETS AND ENGINEERING, DEPARTMENT OF:			
WSA	ADMINISTRATION.			
WSA 00	Personal Services,.....		$26,820.14	
WSA 10	Services Other Than Personal,.....		5,470.56	
11	Transportation of Persons,.....	487.28		
12	Transportation of Things,.....	4.01		
13	Subsistence and Support of Persons,..	384.07		
14	Care of Animals and Vehicles,.....	6.75		
15	Communication Service,.....	852.57		
16	Printing, Engraving, and Binding,....	1,666.59		
17	Advertising and Publications,.....	575.30		
18	Light, Heat, and Power,.....	1,390.77		
19	Miscellaneous Services,.....	103.22		
WSA 20	Fixed Charges and Contributions,.....		4,586.43	
21	Rents,.....	31.00		
23	Taxes and Fees,.....	320.16		
24	Pensions,.....	4,080.60		
29	Miscellaneous Fixed Charges,.....	154.67		
WSA 30	Supplies,.....		927.12	
31	Office Supplies,.....	771.56		
32	Fuel,.....	8.80		
33	Mechanics' Supplies,.....	.50		
34	Cleaning and Toilet Supplies,.....	6.26		
35	Wearing Apparel, Sewing Supplies,...	140.00		
WSA 50	Equipment and Parts,.....		962.40	
54	Furniture and Furnishings,.....	962.40		
				33,766.65
WSR	ASHES AND REFUSE DISPOSAL.			
WSR 00	Personal Services,.....		$149,239.52	
WSR 10	Services Other Than Personal,.....		3,028.24	
11	Transportation of Persons,.....	4.31		
13	Subsistence and Support of Persons,..	26.95		
14	Care of Animals and Vehicles,.....	3.00		
15	Communication Service,.....	1.15		
18	Light, Heat, and Power,.....	192.15		
19	Miscellaneous Services,.....	2,800.68		
	Forward,.....		$152,267.76	

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Code.				
	Forward,		**$152,267.76**	
	Streets and Engineering, Department of (Cont.): Ashes and Refuse Disposal (Cont.).			
WSR 30	Supplies,		25.12	
32	Fuel,	$4.90		
35	Wearing Apparel, Sewing Supplies,	20.22		
WSR 40	Materials,		4.09	
42	Metals and Metal Products,	.85		
44	Lumber and Wood Products,	2.28		
46	Paints and Painters' Materials,	.96		
				$152,296.97
WSB	**Bridges.**			
WSB 00	Personal Services,		$15,340.39	
WSB 10	Services Other Than Personal,		1,789.38	
11	Transportation of Persons,	72.31		
12	Transportation of Things,	178.06		
13	Subsistence and Support of Persons,	1.11		
15	Communication Service,	.15		
17	Advertising and Publications,	109.20		
18	Light, Heat, and Power,	21.30		
19	Miscellaneous Services,	1,357.25		
WSB 30	Supplies,		43.49	
32	Fuel,	29.82		
33	Mechanics' Supplies,	13.67		
WSB 40	Materials,		4,007.31	
41	Raw Materials,	237.54		
42	Metals and Metal Products,	390.17		
43	Non-Metallic Mineral Products,	410.98		
44	Lumber and Wood Products,	1,872.48		
46	Paints and Painters' Materials,	936.00		
49	Miscellaneous Materials,	160.14		
				21,130.57
WSE	**Engineering.**			
WSE 00	Personal Services,		$32,669.15	
WSE 10	Services Other Than Personal,		341.90	
11	Transportation of Persons,	103.20		
12	Transportation of Things,	6.06		
13	Subsistence and Support of Persons,	3.55		
16	Printing, Engraving, and Binding,	51.50		
19	Miscellaneous Services,	177.59		
WSE 30	Supplies,		719.13	
31	Office Supplies,	714.99		
32	Fuel,	.24		
33	Mechanics' Supplies,	.25		
34	Cleaning and Toilet Supplies,	2.43		
38	Medical, Surgical, and Laboratory Supplies,	.97		
39	Miscellaneous Supplies,	.25		
WSE 50	Equipment and Parts,		537.63	
52	Production, Construction, and Conveying Equipment,	62.57		
54	Furniture and Furnishings,	2.34		
56	Educational and Recreational Equipment,	472.72		
				34,267.81

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Code.				
WSG	GARBAGE COLLECTION.			
WSG 00	Personal Services,.....		$40,585.85	
WSG 10	Services Other Than Personal,.....		1,412.49	
13	Subsistence and Support of Persons,..	$11.00		
15	Communication Service,.....	.13		
19	Miscellaneous Services,.....	1,401.36		
				$41,998.34
WSH	HIGHWAYS.			
WSH 00	Personal Services,.....		$250,957.88	
WSH 10	Services Other Than Personal,.....		816.74	
11	Transportation of Persons,.....	213.20		
12	Transportation of Things,.....	334.21		
13	Subsistence and Support of Persons,..	60.92		
15	Communication Service,.....	.70		
19	Miscellaneous Services,.....	207.71		
WSH 20	Fixed Charges and Contributions,.....		23.70	
22	Insurance,.....	9.75		
23	Taxes and Fees Paid by City,.....	13.95		
WSH 30	Supplies,.....		10,062.16	
32	Fuel,.....	9,874.27		
33	Mechanics' Supplies,.....	145.24		
34	Cleaning and Toilet Supplies,.....	20.03		
39	Miscellaneous Supplies,.....	22.62		
WSH 40	Materials,.....		167,495.78	
41	Raw Materials,.....	90,008.59		
42	Metals and Metal Products,.....	882.43		
43	Non-Metallic Mineral Products,.....	40,042.93		
44	Lumber and Wood Products,.....	5,088.82		
46	Paints and Painters' Materials,.....	1,217.45		
49	Miscellaneous Materials,.....	30,255.56		
WSH 50	Equipment and Parts,.....		298.25	
52	Production, Construction, and Conveying Equipment,.....	298.25		
				429,654.51
WSP	REPAIR SHOPS.			
WSP 00	Personal Services,.....		$31,055.23	
WSP 10	Services Other Than Personal,.....		75.58	
11	Transportation of Persons,.....	24.15		
19	Miscellaneous Services,.....	51.43		
WSP 30	Supplies,.....		1,625.99	
32	Fuel,.....	1,382.16		
33	Mechanics' Supplies,.....	49.93		
34	Cleaning and Toilet Supplies,.....	70.84		
37	Provisions for Persons,.....	15.45		
38	Medical, Surgical, and Laboratory Supplies,.....	7.73		
39	Miscellaneous Supplies,.....	99.88		
WSP 40	Materials,.....		3,402.67	
41	Raw Materials,.....	2.97		
42	Metals and Metal Products,.....	916.51		
43	Non-Metallic Mineral Products,.....	17.32		
44	Lumber and Wood Products,.....	2,113.98		
	Forward,.....		$36,159.47	

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Code.				
	Forward,.....		$36,159.47	
	STREETS AND ENGINEERING, DEPARTMENT OF (Cont.): REPAIR SHOP (Cont.).			
45	Fiber Products,.....	$4.40		
46	Paints and Painters' Materials,.....	123.06		
49	Miscellaneous Materials,.....	224.43		
WSP 50	Equipment and Parts,.....		685.85	
52	Production, Construction, and Conveying Equipment,.....	685.85		
				$36,845.32
WSS	SEWERS.			
WSS 00	Personal Services,.....		$53,301.64	
WSS 10	Services Other Than Personal,.....		2,085.99	
11	Transportation of Persons,.....	63.26		
12	Transportation of Things,.....	9.35		
15	Communication Service,.....	16.24		
18	Light, Heat, and Power,.....	1.50		
19	Miscellaneous Services,.....	1,995.64		
WSS 30	Supplies,.....		910.06	
32	Fuel,.....	742.54		
33	Mechanics' Supplies,.....	20.37		
34	Cleaning and Toilet Supplies,.....	59.74		
35	Wearing Apparel, Sewing Supplies,...	83.25		
39	Miscellaneous Supplies,.....	4.16		
WSS 40	Materials,.....		23,953.50	
41	Raw Materials,.....	547.20		
42	Metals and Metal Products,.....	3,144.99		
43	Non-Metallic Mineral Products,.....	20,127.62		
44	Lumber and Wood Products,.....	105.60		
46	Paints and Painters' Supplies,.....	.16		
49	Miscellaneous Materials,.....	27.93		
WSS 50	Equipment and Parts,.....		1,925.58	
52	Production, Construction, and Conveying Equipment,.....	1,755.58		
56	Educational, Scientific, and Recreational Equipment,.....	170.00		
				82,176.77
WSW	SIDEWALKS AND CURBING.			
WSW 00	Personal Services,.....		$38,125.87	
WSW 10	Services Other Than Personal,.....		49.00	
12	Transportation of Things,.....	49.00		
WSW 30	Supplies,.....		81.67	
32	Fuel,.....	79.03		
33	Mechanics' Supplies,.....	2.64		
WSW 40	Materials,.....		27,901.67	
41	Raw Materials,.....	1,374.19		
42	Metals and Metal Products,.....	207.10		
43	Non-Metallic Mineral Products,.....	25,885.26		
44	Lumber and Wood Products,.....	26.97		
46	Paints and Painters' Materials,.....	.51		
49	Miscellaneous Materials,.....	407.64		
				66,158.21

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Code.				
WSY	STABLES AND YARDS.			
WSY 00	Personal Services,.....		$82,572.25	
WSY 10	Services Other Than Personal,.....		11,253.81	
11	Transportation of Persons,.....	$39.66		
12	Transportation of Things,.....	3,982.17		
13	Subsistence and Support of Persons,..	8.00		
14	Care of Animals and Vehicles,.....	1,002.33		
15	Communication Service,.....	.19		
18	Light, Heat, and Power,.....	35.33		
19	Miscellaneous Services,.....	6,185.68		
WSY 20	Fixed Charges and Contributions,.....		59.01	
23	Taxes and Fees,.....	59.01		
WSY 30	Supplies,.....		36,808.04	
31	Office Supplies,.....	6.11		
32	Fuel,.....	15,880.03		
33	Mechanics' Supplies,.....	7,612.25		
34	Cleaning and Toilet Supplies,.....	752.85		
35	Wearing Apparel, Sewing Supplies,...	780.11		
36	Supplies for Animals,.....	11,182.82		
37	Provisions for Persons,.....	34.08		
38	Medical, Surgical, and Laboratory Supplies,.....	66.78		
39	Miscellaneous Supplies,.....	543.06		
WSY 40	Materials,.....		8,101.85	
41	Raw Materials,.....	1,100.05		
42	Metals and Metal Products,.....	2,796.81		
43	Non-Metallic Mineral Products,.....	1,116.25		
44	Lumber and Wood Products,.....	1,560.88		
45	Fiber Products,.....	88.20		
46	Paints and Painters' Materials,.....	1,153.95		
49	Miscellaneous Materials,.....	285.71		
WSY 50	Equipment and Parts,.....		58,419.60	
52	Production, Construction, and Conveying Equipment,.....	56,539.31		
53	Live Stock,.....	1,850.00		
54	Furniture and Furnishings,.....	4.75		
57	Medical, Surgical, and Laboratory Equipment,.....	25.54		
			———	$197,214.56
WSC	STREET CLEANING.			
WSC 00	Personal Services,.....		$150,455.84	
WSC 10	Services Other Than Personal,.....		206.99	
12	Transportation of Things,.....	7.15		
13	Subsistence and Support of Persons,..	24.60		
19	Miscellaneous Services,.....	175.24		
WSC 30	Supplies,.....		368.42	
32	Fuel,.....	101.00		
33	Mechanics' Supplies,.....	10.21		
34	Cleaning and Toilet Supplies,.....	.49		
35	Wearing Apparel, Sewing Supplies,...	243.50		
39	Miscellaneous Supplies,.....	13.22		
			———	
	Forward,.....		$151,031.25	

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Code.				
	Forward,.....		$151,031.25	
	STREETS AND ENGINEERING, DEPARTMENT OF (Cont.): STREET CLEANING (Cont.).			
WSC 40	Materials,.....		563.59	
41	Raw Materials,.....	$526.59		
43	Non-Metallic Mineral Products,.....	2.35		
49	Miscellaneous Materials,.....	34.65		
WSC 50	Equipment,.....		366.00	
52	Production, Construction, and Conveying Equipment,.....	366.00		
				$151,960.84
WSL	STREET LIGHTING.			
WSL 00	Personal Services,.....		$1,200.00	
WSL 10	Services Other Than Personal,.....		147,112.26	
12	Transportation of Things,.....	5.52		
18	Light, Heat, and Power,.....	146,998.79		
19	Miscellaneous Services,.....	112.95		
WSL 30	Supplies,.....		108.28	
31	Office Supplies,.....	59.42		
33	Mechanics' Supplies,.....	48.86		
WSL 50	Equipment and Parts,.....		166.40	
52	Production, Construction, and Conveying Equipment,.....	166.40		
				148,586.94
WSO	STREET OILING.			
WSO 00	Personal Services,.....		$12,836.26	
WSO 40	Materials,.....		21,936.71	
41	Raw Materials,.....	16,442.30		
43	Non-Metallic Mineral Products,.....	5,494.41		
				34,772.97
WSK	STREET SPRINKLING.			
WSK 00	Personal Services,.....		$4,288.66	
WSK 10	Services Other Than Personal,.....		7,574.78	
19	Miscellaneous,.....	7,574.78		
				11,863.44
WS 215	STORES,.....			48,130.64
SE	TAX EXEMPTIONS—SOLDIERS AND SAILORS.			
SE 20	Fixed Charges and Contributions,.....		$1,059.98	
23	Taxes and Fees,.....	1,059.98		
				1,059.98
PM	WEIGHTS AND MEASURES, SEALER OF:			
PM 00	Personal Services,.....		$6,650.00	
PM 10	Services Other Than Personal,.....		702.97	
11	Transportation of Persons,.....	42.95		
12	Transportation of Things,.....	117.72		
13	Subsistence and Support of Persons,..	55.85		
14	Care of Animals and Vehicles,.....	319.78		
15	Communication Service,.....	12.10		
16	Printing, Engraving, and Binding,....	114.49		
17	Advertising and Publications,.....	5.29		
19	Miscellaneous Services,.....	34.79		
PM 20	Fixed Charges and Contributions,.....		49.50	
23	Taxes and Fees,.....	22.00		
29	Miscellaneous Fixed Charges,.....	27.50		
	Forward,.....		$7,402.47	

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Code.				
	Forward,.....		$7,402.47	
	WEIGHTS AND MEASURES, SEALER OF (Cont.):			
PM 30	Supplies,.....		396.34	
31	Office Supplies,.....	$39.60		
32	Fuel,.....	226.52		
33	Mechanics' Supplies,.....	46.88		
34	Cleaning and Toilet Supplies,.....	4.25		
36	Forage,.....	5.90		
38	Medical, Surgical, and Laboratory Supplies,.....	3.46		
39	Miscellaneous Supplies,.....	69.73		
PM 40	Materials,.....		4.95	
42	Metals and Metal Products,.....	2.00		
46	Paints and Painters' Supplies,.....	2.95		
PM 50	Equipment and Parts,.....		740.14	
52	Production, Construction, and Conveying Equipment,.....	534.65		
54	Furniture and Furnishings,.....	4.27		
55	Property and Life Preserving Equipment,.....	201.22		
				$8,543.90
PW	WIRES, INSPECTOR OF:			
PW 00	Personal Services,.....		$499.99	
PW 10	Services Other Than Personal,.....		82.39	
12	Transportation of Things,.....	33.24		
17	Advertising and Publications,.....	13.60		
19	Miscellaneous Services,.....	35.55		
PW 20	Fixed Charges and Contributions,.....		175.00	
24	Pensions,.....	175.00		
PW 30	Supplies,.....		12.95	
31	Office Supplies,.....	5.35		
33	Mechanics' Supplies,.....	7.60		
PW 40	Materials,.....		1,590.65	
42	Metals and Metal Products,.....	311.81		
47	Electrical Materials,.....	1,278.84		
PW 50	Equipment and Parts,.....		81.10	
51	Light, Heat, and Power Equipment,..	81.10		
				2,442.08
OW	WORKMEN'S COMPENSATION:			
OW 10	Services Other Than Personal,.....		$1,872.68	
13	Subsistence and Support of Persons,..	327.34		
15	Communication Service,.....	60.02		
16	Printing, Engraving, and Binding,....	4.32		
19	Miscellaneous Services,.....	1,481.00		
OW 20	Fixed Charges and Contributions,.....		7,683.05	
26	Damages to Persons and Property,...	6,783.05		
29	Miscellaneous Fixed Charges,.....	900.00		
OW 30	Supplies,.....		44.69	
31	Office Supplies,.....	14.49		
38	Medical, Surgical, and Laboratory Supplies,.....	30.20		
				9,600.42

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SPECIAL ACCOUNTS:		
Armory Street Fire Station,	$9,985.87	
Berkshire Avenue Bridge,	303.11	
City Realty Committee,	261.08	
East Springfield Park,	3,368.00	
Forest Park Extension,	3,895.10	
Hooker School Public Sanitary,	3,592.16	
Hooker School Remodeling,	724.06	
Land for Schoolhouse Purposes,	32,500.00	
Liberty School,	600.00	
Porter Lake,	339.23	
Pynchon Street Schoolhouse Removal,	50,676.19	
South End Bridge Repairs,	1,379.05	
Springfield–Ludlow Bridge,	26,459.48	
Springfield–West Springfield Bridge,	13,998.77	
State Street Junior High School,	10,000.00	
Transportation, Committee on	405.15	
Unemployment Relief,	19,183.26	
Veterans' Headquarters,	200.00	
Vocational School	16,000.00	
World War Military Service Census,	44.90	
		$193,915.41
Total Appropriation Charges, General Fund,		$7,485,702.96

CAPITAL FUND

Chestnut Street School Addition,	$8,002.15	
Dwight Street Underpass,	75,042.50	
Dwight Street Widening,	234,609.93	
Forest Park School Addition,	11,817.30	
Homer Street School Additions and Alterations,	9,561.93	
Junior High School,	12,121.71	
Pearl Street Widening,	23,274.39	
State Street Junior High School,	3,063.00	
Surface Sewer, 1919,	3,609.43	
Sewer Construction, 1921,	224,971.65	
Stafford Street Extension,	46,583.65	
Taylor Street Extension,	119,844.74	
Vocational School,	161,274.92	
Water Street Underpass,	175,092.50	
Water Street Widening,	246.50	
Total Appropriation Charges, Capital Fund,		$1,109,116.30

SPECIAL AND TRUST FUND

Everett H. Barney Fund,	$3,762.92	
Smith-Hughes Fund,	2,609.86	
Total Appropriation Charges, Special and Trust Fund,		$6,372.78

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APPROPRIATION ENCUMBRANCES

(Purchase Orders Outstanding November 30, 1921)

(Supporting Schedule F.)

GENERAL FUND

Code				
GS	ASSESSORS, BOARD OF:			
GS 10	Services Other Than Personal,.....		$25.00	
16	Printing, Engraving, and Binding,....	$25.00		
				$25.00
GP	CITY PLANNING BOARD:			
GP 10	Services Other Than Personal,.....		10,000.00	
19	Miscellaneous Services,.....	10,000.00		
				10,000.00
CC	CHARITIES, DEPARTMENT OF:			
CCH	ALMSHOUSE.			
CCH 30	Supplies,.....		23.47	
32	Fuel,.....	23.47		
				23.47
PF	FIRE DEPARTMENT:			
PFF	FIRE ALARM SYSTEM.			
PFF 10	Services Other Than Personal,.....		88.85	
11	Transportation of Persons,.....	5.25		
14	Care of Animals and Vehicles,.....	3.85		
19	Miscellaneous Services,.....	29.75		
PFF 30	Supplies,.....		14.50	
31	Office Supplies,.....	2.50		
33	Mechanics' Supplies,.....	12.00		
PFF 40	Materials,.....		.80	
42	Metals and Metal Products,.....	.80		
PFF 50	Equipment,.....		761.38	
51	Light, Heat, and Power Equipment,..	757.38		
52	Production, Construction, and Conveying Equipment,.....	4.00		
				815.53
PFO	OPERATION.			
PFO 10	Services Other Than Personal,.....		3.15	
14	Care of Animals and Vehicles,.....	3.15		
PFO 30	Supplies,.....		46.49	
32	Fuel,.....	46.49		
PFO 50	Equipment,.....		79.25	
51	Light, Heat, and Power Equipment,..	19.25		
55	Property and Life Preserving Equipment,.....	60.00		
				128.89
WB	PUBLIC BUILDINGS, DEPARTMENT OF:			
WBG	MUNICIPAL GROUP BUILDINGS.			
WBG 10	Services Other Than Personal,.....		168.00	
19	Miscellaneous Services,.....	168.00		
WBG 40	Materials,.....		503.75	
42	Metals and Metal Products,.....	503.75		
WBG 50	Equipment,.....		85.00	
54	Furniture and Furnishings,.....	85.00		
				756.75

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Code					
WB	PUBLIC BUILDINGS, DEPARTMENT OF (Cont.):				
WBH	HEATING PLANT.				
WBH 30	Supplies,.....			$1,497.71	
32	Fuel,.....	$1,387.71			
33	Mechanics' Supplies,.....	78.80			
34	Cleaning and Toilet Supplies,.....	31.20			
WBH 50	Equipment,.....			72.00	
54	Furniture and Furnishings,.....	72.00			
					$1,569.71
WBO	MUNICIPAL ORGAN CONCERTS.				
WBO 10	Services Other Than Personal,.....			1,144.74	
19	Miscellaneous Services,.....	1,144.74			
					1,144.74
WBSM	SCHOOLS—MAINTENANCE.				
WBSM 10	Services Other Than Personal,.....			30.10	
19	Miscellaneous Services,.....	30.10			
WBSM 30	Supplies,.....			10.58	
35	Wearing Apparel and Sewing Supplies,	10.58			
WBSM 40	Materials,.....			18.80	
42	Metals and Metal Products,.....	18.80			
WBSM 50	Equipment,.....			3,788.20	
51	Light, Heat, and Power Equipment,..	385.20			
52	Production, Construction, and Conveying Equipment,.....	237.32			
54	Furniture and Furnishings,.....	3,165.68			
					3,847.68
WBSO	SCHOOLS—OPERATION.				
WBSO 30	Supplies,.....			3,197.77	
32	Fuel,.....	3,197.77			
WBSO 50	Equipment,.....			182.00	
52	Production, Construction, and Conveying Equipment,.....	182.00			
					3,379.77
PP	POLICE DEPARTMENT.				
PP 30	Supplies,.....			2,397.00	
35	Wearing Apparel and Sewing Supplies,	2,075.00			
39	Miscellaneous Supplies,.....	322.00			
					2,397.00
ES	SCHOOL DEPARTMENT:				
ESA	ADMINISTRATION.				
ESA 50	Equipment,.....			52.50	
54	Furniture and Furnishings,.....	52.50			
					52.50
ESC	CENTRAL HIGH SCHOOL.				
ESC 10	Services Other Than Personal,.....			110.00	
16	Printing, Engraving, and Binding,....	110.00			
ESC 30	Supplies,.....			448.99	
31	Office Supplies,.....	448.99			
					558.99
ESCS	CONTINUATION SCHOOL.				
ESCS 40	Materials,.....			250.00	
47	Electrical Materials,.....	250.00			
ESCS 50	Equipment,.....			307.50	
54	Furniture and Furnishings,.....	225.00			
56	Educational and Recreational Equipment,.....	82.50			557.50

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Code					
ES	School Department (Cont.):				
ESEH	Evening Schools—High.				
ESEH 30	Supplies,.....			$127.50	
31	Office Supplies,.....		$127.50		
					$127.50
ESG	Graded Schools and Junior High.				
ESG 10	Services Other Than Personal,.....			350.00	
11	Transportation of Persons,.....		350.00		
ESG 30	Supplies,.....			839.67	
31	Office Supplies,.....		786.78		
33	Mechanics' Supplies,.....		7.89		
34	Cleaning and Toilet Supplies,.....		45.00		
ESG 40	Materials,.....			109.94	
42	Metals and Metal Products,.....		4.61		
44	Lumber and Wood Products,.....		105.33		
ESG 50	Equipment,.....			1,539.66	
52	Production, Construction, and Conveying Equipment,.....		461.37		
54	Furniture and Furnishings,.....		858.04		
56	Educational and Recreational Equipment,.....		220.25		
					2,839.27
ESH	High School of Commerce.				
ESH 30	Supplies,.....			30.00	
31	Office Supplies,.....		30.00		
					30.00
ESK	Kindergartens.				
ESK 30	Supplies,.....			44.45	
31	Office Supplies,.....		44.45		
ESK 50	Equipment,.....			51.12	
54	Furniture and Furnishings,.....		51.12		
					95.57
EST	Technical High School.				
EST 50	Equipment,.....			45.00	
52	Production, Construction, and Conveying Equipment,.....		45.00		
					45.00
ESTR	Evening School of Trades.				
ESTR 30	Supplies,.....			90.58	
33	Mechanics' Supplies,.....		90.58		
					90.58
ESV	Vocational School.				
ESV 40	Materials,.....			80.00	
42	Metals and Metal Products,.....		30.00		
44	Lumber and Wood Products,.....		50.00		
					80.00
WS	Streets and Engineering, Department of:				
WSA	Administration.				
WSA 10	Services Other Than Personal,.....			220.75	
16	Printing, Engraving, and Binding,....		220.75		
WSA 30	Supplies,.....			16.90	
31	Office Supplies,.....		16.90		
					237.65

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Code				
WS	STREETS AND ENGINEERING, DEPARTMENT OF (Cont.):			
WSB	BRIDGES.			
WSB 40	Materials,.....		$154.75	
46	Paints and Painters' Supplies,.....	$154.75		
				$154.75
WSE	ENGINEERING.			
WSE 50	Equipment,.....		10.00	
56	Educational and Recreational Equipment,.....	10.00		
				10.00
WSH	HIGHWAYS.			
WSH 30	Supplies,.....		2.85	
32	Fuel,.....	2.85		
WSH 40	Materials,.....		1,097.96	
42	Metals and Metal Products,.....	1,000.42		
44	Lumber and Wood Products,.....	89.88		
46	Paint and Painters' Supplies,.....	7.66		
				1,100.81
WSP	REPAIR SHOPS.			
WSP 40	Materials,.....		4.25	
44	Lumber and Wood Products,.....	4.25		
				4.25
WSS	SEWERS.			
WSS 10	Services Other Than Personal,.....		395.00	
19	Miscellaneous Services,.....	395.00		
WSS 50	Equipment,.....		250.00	
52	Production, Construction, and Conveying Equipment,.....	250.00		
				645.00
WSY	STABLES AND YARDS.			
WSY 10	Services Other Than Personal,.....		30.99	
14	Care of Animals and Vehicles,.....	26.49		
19	Miscellaneous Services,.....	4.50		
WSY 30	Supplies,.....		12.98	
33	Mechanics' Supplies,.....	4.78		
35	Wearing Apparel and Sewing Supplies,	5.75		
38	Medical, Surgical, and Laboratory Supplies,.....	2.30		
39	Miscellaneous Supplies,.....	.15		
WSY 40	Materials,.....		5.37	
42	Metals and Metal Products,.....	5 37		
WSY 50	Equipment,.....		488.12	
52	Production, Construction, and Conveying Equipment,.....	488.12		
				537.46
WSL	STREET LIGHTING.			
WSL 30	Supplies,.....		39.40	
33	Mechanics' Supplies,.....	39.40		
				39.40
PM	WEIGHTS AND MEASURES, SEALER OF:			
PM 50	Equipment,.....		75.00	
55	Property and Life Preserving Equipment,.....	75.00		
				75.00

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PW	WIRES, INSPECTOR OF:			
PW 30	Supplies,.....		$24.10	
31	Office Supplies,.....	$24.10		
PW 40	Materials,.....		1,813.04	
42	Metals and Metal Products,.....	1,813.04		
				$1,837.14

SPECIAL ACCOUNTS

Hooker School Public Sanitary,.....	$4,738.70	
Pynchon Street Schoolhouse Removal,.....	875.22	
South End Bridge Repairs,.....	33,971.86	
Stores—Department of Streets and Engineering,.....	6,465.35	
		46,051.13
Total for 1921,.....		$79,258.04

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PRIOR YEARS APPROPRIATION CHARGES

(Payments in 1921 from amounts reserved for outstanding orders of prior years.)

Code				
GS	ASSESSORS, BOARD OF:			
GS 50	Equipment,.....		$7.66	
	Furniture and Furnishings,.....	$7.66		
				$7.66
PF	FIRE DEPARTMENT:			
PFA	ADMINISTRATION.			
PFA 10	Services Other Than Personal,.....		396.32	
16	Printing, Engraving, and Binding,....	396.32		
PFA 50	Equipment,.....		57.75	
54	Furniture and Furnishings,.....	57.75		
				454.07
PFF	FIRE ALARM SYSTEM.			
PFF 10	Services Other Than Personal,.....		3.50	
19	Miscellaneous Services,.....	3.50		
PFF 30	Supplies,.....		16.95	
33	Mechanics' Supplies,.....	16.95		
PFF 40	Materials,.....		30.00	
46	Paints and Painters' Supplies,.....	30.00		
PFF 50	Equipment,.....		2,755.75	
51	Heat, Light, and Power Equipment,....	2,755.75		
				2,806.20
PFO	OPERATION.			
PFO 30	Supplies,.....		91.79	
33	Mechanics' Supplies,.....	91.79		
PFO 40	Materials,.....		1.12	
42	Metals and Metal Products,.....	.67		
46	Paints and Painters' Supplies, ...	.45		
				92.91
PH	HEALTH DEPARTMENT:			
PHH	HOSPITAL.			
PHH 30	Supplies,.....		35.00	
38	Medical, Surgical, and Laboratory Supplies,.....	35.00		
				35.00
WB	PUBLIC BUILDINGS, DEPARTMENT OF:			
WBA	ADMINISTRATION.			
WBA 30	Supplies,.....		50.00	
31	Office Supplies,.....	50.00		
				50.00
WBG	MUNICIPAL GROUP BUILDINGS.			
WBG 10	Services Other Than Personal,.....		50.00	
19	Miscellaneous Services,.....	50.00		
WBG 50	Equipment,.....		1,009.36	
54	Furniture and Furnishings,.....	1,009.36		
				1,059.36
WBH	MUNICIPAL HEATING PLANT.			
WBH 50	Equipment,.....		216.00	
55	Property and Life Preserving, and Caretaking Equipment,.....	216.00		
				216.00

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Code				
WB	PUBLIC BUILDINGS, DEPARTMENT OF (Cont.):			
WBSM	SCHOOL—MAINTENANCE.			
WBSM 40	Materials,.....		$270.57	
44	Lumber and Wood Products,.....	$149.92		
46	Paints and Painters' Supplies,.....	96.65		
47	Electrical Materials,.....	24.00		
WBSM 50	Equipment,.....		115.00	
54	Furniture and Furnishings,.....	115.00		
				$385.57
WBSO	SCHOOLS—OPERATION.			
WBSO 30	Supplies,.....		12,191.04	
32	Fuel,.....	12,191.04		
				12,191.04
WBO	MUNICIPAL ORGAN CONCERTS.			
WBO 00	Personal Services,.....		965.00	
WBO 10	Services Other Than Personal,.....		109.83	
16	Printing, Engraving, and Binding,....	71.75		
17	Advertising and Publications,.....	38.08		
				1,074.83
RP	PARK DEPARTMENT:			
RPO	OPERATION.			
RPO 30	Supplies,.....		500.00	
38	Medical, Surgical, and Laboratory Supplies,.....	500.00		
				500.00
ES	SCHOOL DEPARTMENT:			
ESC	CENTRAL HIGH SCHOOL.			
ESC 30	Supplies,.....		789.61	
31	Office Supplies,.....	447.64		
34	Cleaning and Toilet Supplies,.....	341.97		
ESC 50	Equipment,.....		29.50	
56	Educational and Recreational Equipment,.....	29.50		
				819.11
ESCS	CONTINUATION SCHOOL.			
ESCS 50	Equipment,.....		205.20	
52	Production, Construction, and Conveying Equipment,.....	205.20		
				205.20
ESG	GRADED SCHOOLS AND JUNIOR HIGH.			
ESG 30	Supplies,.....		2,839.31	
31	Office Supplies,.....	2,791.32		
35	Wearing Apparel and Sewing Supplies,	47.99		
ESG 40	Materials,.....		415.18	
44	Lumber and Wood Products,.....	415.18		
ESG 50	Equipment,.....		1,667.48	
51	Heat, Light, and Power Equipment,...	49.40		
52	Production, Construction, and Conveying Equipment,.....	275.00		
54	Furniture and Furnishings,.....	529.56		
56	Educational and Recreational Equipment,.....	813.47		
				4,921.92

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Code				
ES	SCHOOL DEPARTMENT (Cont.):			
ESGE	EVENING SCHOOLS—ELEMENTARY.			
ESGE 10	Services Other Than Personal,.....		$27.16	
16	Printing, Engraving, and Binding,....	$27.16		
				$27.16
ESH	HIGH SCHOOL OF COMMERCE.			
ESH 30	Supplies,.....		122.00	
31	Office Supplies,.....	122.00		
ESH 50	Equipment,.....		249.09	
54	Furniture and Furnishings,.....	249.09		
				371.09
EST	TECHNICAL HIGH SCHOOL.			
EST 30	Supplies,.....		30.00	
32	Fuel,.....	30.00		
EST 40	Materials,.....		294.75	
42	Metals and Metal Products,.....	192.75		
44	Lumber and Wood Products,.....	102.00		
EST 50	Equipment,.....		522.55	
52	Production, Construction, and Conveying Equipment,.....	95.80		
54	Furniture and Furnishings,.....	46.25		
56	Educational and Recreational Equipment,.....	380.50		
				847.30
ESV	VOCATIONAL SCHOOL.			
ESV 30	Supplies,.....		28.00	
31	Office Supplies,.....	28.00		
ESV 40	Materials,.....		40.48	
42	Metals and Metal Products,.....	40.48		
				68.48
ESVE	EVENING SCHOOLS—VOCATIONAL.			
ESVE 40	Materials,.....		193.18	
42	Metals and Metal Products,.....	193.18		
				193.18
ESVH	VOCATIONAL SCHOOL—HOOKER.			
ESVH 40	Materials,.....		203.30	
42	Metals and Metal Products,.....	203.30		
				203.30
WS	STREETS AND ENGINEERING:			
WSA	ADMINISTRATION.			
WSA 10	Services Other Than Personal,.....		41.69	
16	Printing, Engraving, and Binding,....	41.69		
WSA 30	Supplies,.....		210.60	
31	Office Supplies,.....	210.60		
				252.29
WSL	STREET LIGHTING.			
WSL 50	Equipment,.....		190.00	
52	Production, Construction, and Conveying Equipment,.....	190.00		
				190.00

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Code				
WS	STREETS AND ENGINEERING, DEPARTMENT OF (Cont.):			
WSP	REPAIR SHOPS.			
WSP 40	Materials,.....		$278.10	
44	Lumber and Wood Products,.....	$278.10		
WSP 50	Equipment,.....		50.00	
52	Production, Construction, and Conveying Equipment,.....	50.00		
				$328.10
WSS	SEWERS.			
WSS 10	Services Other Than Personal,.....		50.00	
19	Miscellaneous Services,.....	50.00		
WSS 50	Equipment,.....		59.42	
52	Production, Construction, and Conveying Equipment,.....	59.42		
				109.42
WSY	STABLES AND YARDS.			
WSY 10	Services Other Than Personal,.....		716.53	
14	Care of Animals and Vehicles,.....	68.75		
19	Miscellaneous Services,.....	647.78		
WSY 30	Supplies,.....		389.87	
33	Mechanics' Supplies,.....	1.50		
35	Wearing Apparel and Sewing Supplies,	24.50		
36	Forage and Supplies for Animals,....	363.87		
WSY 40	Materials,.....		3.56	
42	Metals and Metal Products,.....	2.05		
46	Paints and Painters' Supplies,.....	1.51		
WSY 50	Equipment,.....		1,964.24	
52	Production, Construction, and Conveying Equipment,.....	1,964.24		
				3,074.20
PM	WEIGHTS AND MEASURES, SEALER OF:			
PM 10	Services Other Than Personal,.....		62.91	
16	Printing, Engraving, and Binding,....	62.91		
				62.91
	Total Prior Year's Appropriation Charges,.....			$30,546.30

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CITY OF SPRINGFIELD, MASSACHUSETTS.

Cash Receipts and Cash Payments of the City Treasury.

(Exclusive of Sinking Fund.)

For the Year Ended November 30, 1921.

SUMMARY.

Receipts.		Payments.	
General Fund (Schedule G),	$13,083,927.70	General Fund,	$13,271,655.97
Water Fund (Schedule G),	559,839.80	Water Fund,	576,625.02
Capital Fund (Schedule G),	1,346,892.55	Capital Fund,	1,111,634.93
Special and Trust Fund (Schedule G),	12,408.42	Special and Trust Fund,	6,321.33
	$14,953,068.47		$14,966,237.25
Balance on December 1, 1920,	864,968.34	Balance on November 30, 1921,	851,799.56
	$15,818,036.81		$15,818,036.81

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CASH RECEIPTS.

(Schedule G.)

GENERAL FUND.

TAXES.			
Year 1921.			
Poll,	$153,965.00		
Personal,	750,766.94		
Real,	3,715,609.99		
		$4,620,341.93	
Year 1920.			
Poll,	$1,957.00		
Personal,	135,042.84		
Real,	1,252,833.13		
		1,389,832.97	
Year 1919.			
Poll,	$74.00		
Personal,	74.46		
Real,	2,486.76		
		2,635.22	
Year 1918.			
Personal,		3.88	
Taxes Paid After Abatement.			
Year 1921,	$6.00		
Year 1920,	4.16		
Year 1919,	5.00		
		15.16	
From the Commonwealth.			
Corporation Tax,	$575,711.72		
Income Tax,	571,729.38		
National Bank Tax,	8,067.89		
		1,155,508.99	
			$7,168,338.15
FEES.			
Assessors, Board of,		$11.70	
City Clerk,		5,539.35	
City Collector,		7,101.64	
License Commissioners, Board of,		470.00	
Lockup,		164.30	
Public Sanitary,		1,420.54	
Sealer of Weights and Measures,		1,099.04	
			15,806.57
FINES.			
House of Correction,		$2,083.50	
Police Court,		17,248.74	
			19,332.24
INTEREST.			
On Bank Balances.			
City Clerk,	$70.16		
City Collector,	1,870.19		
City Treasurer,	12,565.44		
		$14,505.79	
Forward,		$14,505.79	$7,203,476.96

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Forward,	$14,505.79	$7,203,476.96
INTEREST (Cont.).		
On Apportioned Betterments,	810.14	
On Bonds Sold,	281.95	
On Special Assessments,	1,399.46	
On Taxes,	40,802.66	
		57,800.00
LICENSES.		
Alcohol,	$51.00	
Auctioneer,	68.00	
Bowling Alley,	20.00	
Common Victualer,	820.00	
Dance,	763.00	
Dead Animal Removal,	1.00	
Dog,	5,736.57	
Elevator Operator,	219.00	
Exhibition,	276.00	
Express,	566.84	
Farmers,	32.50	
Fruit and Vegetable Peddler,	2,725.00	
Innholder,	65.00	
Intelligence Office,	28.00	
Liquor,	26.00	
Lodging House,	124.00	
Manicure and Massage,	11.00	
Milk,	525.50	
Miscellaneous,	2.00	
Motor Vehicle.		
"Jitney,"	2,900.00	
"Jitney" Operator,	44.00	
Class 1—Agent,	305.00	
Class 2—Used Car Dealer,	280.00	
Class 3—Junk,	45.00	
Non-Alcoholic Beverages,	45.00	
Pawnbroker,	375.00	
Peddler,	525.00	
Pool Room,	1,332.00	
Rag Gatherer,	318.18	
Second Hand Dealer,	126.00	
Special Sunday,	390.00	
Street Musician,	2.25	
Sunday Sales,	945.00	
Sunday Theater,	7,748.00	
Taxicab,	85.00	
Theater,	1,330.85	
		28,856.69
PERMITS.		
Marriage,	$1,276.00	
Sewer Entrance,	35,626.42	
Sign,	289.00	
Street Obstruction,	4,903.46	
Street Opening,	778.00	
		42,872.88
Forward,		$7,333,006.53

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Forward,			$7,333,006.53
PREMIUM ON BONDS,			17,978.50
RENTS.			
Administration Building,		$3,097.80	
Auditorium,		14,420.00	
Miscellaneous:			
Forest Park Restaurant,		500.00	
Land,		978.83	
Police Court,		1,100.00	
Sundry,		350.00	
Municipal Organ,		495.00	
School Halls,		343.00	
School Property,		2,169.50	
			23,454.13
SINKING FUND COMMISSIONERS.			
From Retirement of Bonds,			125,000.00
SPECIAL ASSESSMENTS.			
Betterments—Street,		$44,638.83	
Betterments—Dwight Street Widening,		6,015.37	
Sidewalks and Curbing,		46,117.29	
Street Watering and Oiling,		37,950.67	
			134,722.16
TEMPORARY LOANS,			4,800,000.00
DEPARTMENTAL.			
Assessors, Board of.			
Miscellaneous Sales,			65.00
Building Department.			
Miscellaneous Sales,			15.00
Charities, Department of.			
Care at Almshouse.			
Reimbursement by Cities and Towns,	$4,492.63		
Reimbursement by Commonwealth,	1,816.74		
Reimbursement by Individuals,	5,337.22		
		$11,646.59	
Miscellaneous Sales.			
Almshouse Products,	$760.08		
Sundry,	29.50		
Wood,	4,259.38		
		5,048.96	
Recovered Expenditures.			
From Cities and Towns,	$4,964.89		
From Commonwealth,	24,529.63		
From Individuals,	347.78		
		29,842.30	
			46,537.85
City Collector.			
Miscellaneous Sales,			30.00
City Realty Committee.			
Sale of Land,			50.00
Fire Department.			
Miscellaneous Sales,		$818.50	
Recovered Expenditures,		1.58	
			820.08
Forward,			$12,481,679.25

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Forward,.....			$12,481,679.25
Health Department.			
Care of Hospital,.....		$10,019.86	
Miscellaneous Sales,.....		158.00	
Recovered Expenditures,.....		86.57	
			10,264.43
Law Department.			
Miscellaneous Sales,.....			30.00
License Commissioners, Board of.			
Recovered Expenditures,.....			52.70
Mayor.			
Miscellaneous Sales,.....			32.50
Miscellaneous.			
Commission on Telephone Calls,.....			193.05
Municipal Market.			
Miscellaneous Sales,.....			24.00
Police Department.			
Miscellaneous Sales,.....		$1,659.81	
Recovered Expenditures,.....		2.00	
			1,661.81
Public Buildings, Department of.			
School Buildings.			
Miscellaneous Sales,.....	$45.68		
Recovered Expenditures,.....	351.19		
		$396.87	
Sale of Buildings,.....		1,210.00	
			1,606.87
Public Parks, Department of.			
Fees—Bathhouse,.....		$1,170.20	
Miscellaneous Sales,.....		4,380.14	
Recovered Expenditures,.....		997.55	
Services,.....		87.45	
			6,635.34
Public Safety, Committee on			
Miscellaneous Sales, ...		$326.25	
Recovered Expenditures,.....		5.93	
Unused Balance of Fund,.....		19.32	
			351.50
Public Works, Board of.			
Miscellaneous Sales,.....			25.00
School Department.			
Miscellaneous Sales.			
Graded Schools Lunches,.....	$1,518.66		
High Schools Lunches,.....	47,831.51		
Sundry,.....	1,809.74		
Vocational School,.....	644.67		
		$51,804.58	
Moving Picture Receipts,.....		1,280.70	
Recovered Expenditures.			
From Commonwealth.			
Americanization,.....	$5,945.99		
Vocational,.....	12,748.73		
Sundry,.....	8.20		
		18,702.92	
Forward,.....		$71,788.20	$12,502,556.45

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Forward,		$71,788.20	$12,502,556.45
School Department (Cont.).			
Tuition.			
Central High School,	$11,345.00		
Evening High School,	1,082.13		
Evening School—Elementary,	24.98		
Evening School of Trades,	2,967 00		
Evening Vocational School,	560.00		
Graded Schools and Junior High,	9,917.85		
High School of Commerce,	10,013.08		
Technical High School,	17,875.00		
Vocational School,	23,733.50		
		77,518.54	
			149,306.74
Sealer of Weights and Measures.			
Miscellaneous Sales,			250.00
Soldiers' Relief Commissioner.			
Recovered Expenditures.			
Reimbursement by Commonwealth.			
Military Aid,		$375.00	
Soldiers' and Sailors' Burials,		477.63	
State Aid,		9,010.00	
			9,862.63
Streets and Engineering, Department of.			
Miscellaneous Sales.			
Garbage,	$10,190.87		
Sundry,	7,571.66		
		$17,762.53	
Recovered Expenditures.			
Administration,	$61.50		
Bridges,	21,418.92		
Highways,	40,329.57		
Repair Shops,	126.26		
Sewers,	2,868.37		
Sidewalks and Curbing,	3,211 26		
Stables and Yards,	75.49		
Street Cleaning,	70.02		
Street Oiling,	679.69		
		68,841.08	
Rent of Equipment,		204.00	
Services.			
Engineering,	$26.47		
Street Sprinkling,	3,204.20		
		3,230.67	
			90,038.28
Treasury Department.			
Miscellaneous Sales,			66.25
REFUNDS.			
Departmental.			
Assessors, Board of,	$17.00		
Charities, Department of,	87.17		
City Collector,	62.53		
Forward,	$166.70		$12,752,080.35

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Forward,.....	$166.70		$12,752,080 35
REFUNDS (Cont.).			
Departmental (Cont.).			
City Council,.....	300.00		
Fire Department,.....	35.00		
Health Department,.....	53.64		
Police Department,.....	93.00		
Public Buildings, Department of,.....	212.01		
Public Parks, Department of,.....	362.83		
Refunds Payable,.....	10.08		
School Department,.....	68.37		
Soldiers' Relief Commissioner,.....	160.00		
Streets and Engineering, Department of,.....	9,273.50		
		$10,785.13	
Petty Cash Funds.			
Assessors, Board of,.....	$25.00		
Charities, Department of,.....	4,000.00		
Health Department,.....	50.00		
High Schools Lunch Department,.....	1,350.00		
Law Department,.....	50.00		
License Commissioners, Board of,.....	25.00		
Police Department,.....	600.00		
Public Buildings, Department of,.....	100.00		
School Department,.....	300.00		
Sealer of Weights and Measures,.....	25.00		
Streets and Engineering, Department of,.....	100.00		
Workmen's Compensation Agent,.....	900 00		
		7,525.00	
			18,260.13
FROM COMMONWEALTH.			
Taxes Paid After Abatement,.....			4,914.00
TAX TITLES,.....			2,923.63
TRANSFERS.			
Streets and Engineering, Department of.			
From Capital Fund Accounts,.....			255,744.59
Total General Fund Receipts,.....			$13,033,927.70
WATER FUND.			
REFUNDS.			
Petty Cash,.....	$250.00		
Sundry,.....	211.35		
		$461.35	
SALE OF MISCELLANEOUS MATERIAL,.....		81,542.11	
SALE OF WATER,.....		474,946.02	
TRANSFER FROM DEPARTMENT OF STREETS AND ENGINEERING,.....		2,890.32	
Total Water Fund Receipts,.....			559,839.80
Forward,.....			$13,593,767.50

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Forward,.....			$13,593,767.50
CAPITAL FUND.			
SALE OF BONDS,.....		$1,275,000.00	
SALE OF LAND AND BUILDINGS,.....		45,723.79	
TRANSFERS (From General Fund).			
Junior High School,.....	$10,000.00		
Vocational School,.....	16,168.76		
		26,168.76	
Total Capital Fund Receipts,.....			1,346,892.55
SPECIAL AND TRUST FUND.			
INTEREST.			
Gurdon Bill Fund,.....	$277.55		
Charles S. Marsh Fund,.....	28.47		
William H. Smith Fund,.....	56.06		
		$362.08	
PRINCIPAL.			
Everett H. Barney Fund,.....	$10,000.00		
Smith-Hughes Fund,.....	2,046.34		
		12,046.34	
Total Special and Trust Fund Receipts,.....			12,408.42
Total Cash Receipts,.....			$14,953,068.47

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ESTIMATED REVENUES.

For the Fiscal Year Ended November 30, 1921.

(Schedule H.)

	Estimate for Year.	Accruals for Year.	Excess over Estimate.
Additional Taxes,	$1,000.00	$5,924.32	$4,924.32
Business Taxes—From Commonwealth,	325,000.00	325,784.65	784.65
Charities, Department of,	50,000.00	37,180.14	12,819.86*
Fees,	13,000.00	16,302.52	3,302.52
Fines,	15,000.00	19,332.24	4,332.24
Fire Department,	500.00	420.08	79.92*
Health Department,	17,000.00	19,199.09	2,199.09
Income Tax Reimbursement,	594,016.15	613,672.26	19,656.11
Interest,	60,000.00	58,988.05	1,011.95*
Licenses,	27,000.00	29,098.68	2,098.68
Miscellaneous—Premium on Bonds,	30,000.00	43,095.40	13,095.40
Miscellaneous—Other,	8,500.00	8,686.50	186.50
Permits,	37,000.00	42,781.38	5,781.38
Police Department,	1,000.00	1,686.81	686.81
Public Buildings, Department of,	3,000.00	1,672.62	1,327.38*
Public Parks, Department of,	2,000.00	6,528.84	4,528.84
Rents,	28,000.00	26,090.10	1,909.90*
School Department,	130,000.00	159,551.73	29,551.73
Soldiers' and Sailors' Benefits,	22,000.00	9,862.63	12,137.37*
Special Assessments,	145,000.00	175,269.65	30,269.65
Streets and Engineering, Department of,	60,000.00	90,482.07	30,482.07
	$1,569,016.15	$1,691,609.76	$122,593.61

*Under Estimate.

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EXPENSE INCURRED IN YEAR ENDED NOVEMBER 30, 1921.

(Schedule I.)

GENERAL FUND.

Department.			Department.		
Administration of Trust Funds,	(Schedule 1)	$425.00	Forward,		$3,427,637.73
Assessors, Board of,	(Schedule 2)	45,751.01	Refunds,	(Schedule 30)	3,963.44
Building Commissioner,	(Schedule 3)	30,706.59	Revenues Receivable, Abatement of,	(Schedule 31)	39,698.36
Celebrations,	(Schedule 4)	7,787.96	School Department,	(Schedule 32)	1,854,129.23
Charities, Department of,	(Schedule 5)	173,044.92	Smoke Inspector,	(Schedule 33)	418.89
City Auditor,	(Schedule 6)	16,851.11	Soldiers' Relief Commissioner,	(Schedule 34)	40,128.80
City Clerk,	(Schedule 7)	16,756.56	Soldiers' and Sailors' Graves, Care of,	(Schedule 35)	876.00
City Collector,	(Schedule 8)	32,932.99	Streets and Engineering, Department of,	(Schedule 36)	1,392,395.41
City Council,	(Schedule 9)	6,836.74	Taxes:	(Schedule 37)	
City Planning Board,	(Schedule 10)	9,235.80	County Tax,		207,216.10
City Treasurer,	(Schedule 11)	18,213.56	National Bank Tax,		46,121.54
Damages—Land,	(Schedule 12)	2,088.77	State Tax,		701,957.80
Damages—Persons and Property,	(Schedule 13)	4,185.81	Tax Exemptions—Soldiers and Sailors,	(Schedule 38)	1,059.93
Elections,	(Schedule 14)	16,890.84	Weights and Measures, Sealer of,	(Schedule 39)	8,461.58
Fire Department,	(Schedule 15)	670,488.20	Wires, Inspector of,	(Schedule 40)	2,442.08
Fish Warden,	(Schedule 16)	25.00	Workmen's Compensation,	(Schedule 41)	8,700.42
Forest Warden,	(Schedule 17)	100.00	Special Accounts:		
Health Department,	(Schedule 18)	114,736.55	Berkshire Avenue Bridge,	(Schedule 42)	303.11
Law Department,	(Schedule 19)	12,010.23	City Realty, Committee on,	(Schedule 43)	261.08
License Commissioners, Board of,	(Schedule 20)	658.54	Forest Park Extension,	(Schedule 44)	1,510.50
Mayor,	(Schedule 21)	9,678.63	Porter Lake,	(Schedule 45)	339.23
Municipal Debt,	(Schedule 22)	934,887.54	Pynchon Street Schoolhouse Removal,	(Schedule 46)	26,720.00
Police Department,	(Schedule 23)	443,226.21	South End Bridge Repairs,	(Schedule 47)	1,379.05
Premium on Bonds,	(Schedule 24)	2,528.41	Springfield—Ludlow Bridge,	(Schedule 48)	26,459.48
Printing, Committee on,	(Schedule 25)	6,106.71	Springfield—West Springfield Bridge,	(Schedule 49)	13,998.77
Public Buildings, Department of,	(Schedule 26)	475,607.35	Transportation, Committee on,	(Schedule 50)	405.15
Public Library,	(Schedule 27)	137,737.00	Unemployment Relief,	(Schedule 51)	19,183.26
Public Parks, Department of,	(Schedule 28)	236,027.50	Veterans' Headquarters,	(Schedule 52)	200.00
Public Works, Board of,	(Schedule 29)	2,112.20	World War Military Service Census,	(Schedule 53)	44.90
Forward,		$3,427,637.73	Total General Fund Expense,		$7,826,011.84

WATER FUND.

Water Department,	$455,985.39	
Total Water Fund Expense,		455,985.39

SPECIAL AND TRUST FUND.

Everett H. Barney Fund,	$3,762.92	
Smith-Hughes Fund,	2,609.86	
Total Special and Trust Fund Expense,		6,372.78
Total Expense,		$8,288,370.01

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DETAILED DEPARTMENTAL EXPENSE SCHEDULES AS REPORTED BY DEPARTMENTS.
(Supporting Schedule I).
GENERAL FUND.

Administration of Trust Funds (Schedule 1).			
Salary of Treasurer,.....		$300.00	
Salary of Clerk,.....		100.00	
Rent of Safe Deposit Box,.....		25.00	
			$425.00
Assessors, Board of (Schedule 2).			
Administration.			
Salaries of Assessors,.....		$10,099.92	
Salaries of Assistant Assessors,.....		4,642.18	
Salaries and Wages, Permanent Employees,...		11,493.74	
Salaries and Wages, Temporary Employees,..		11,230.29	
Stationery and Office Supplies,.....		712.11	
Printing, Binding, etc.,.....		6,392.15	
Advertising,.....		32.58	
Communication Service.			
Postage,.....		505.85	
Telephone and Telegraph,.....		58.20	
Traveling Expenses, ...		162.31	
Replacement of Equipment,.....		290.25	
Miscellaneous Supplies and Expenses,.....		148.43	
		$45,768.01	
Less Transfers and Refunds,.....		17.00	
			$45,751.01
Building Commissioner (Schedule 3).			
Administration.			
Salary of Building Commissioner,.....	$4,200.00		
Salaries and Wages, Permanent Office Employees,.....	1,366.68		
Salaries and Wages, Board of Appeal,.....	120.00		
Stationery and Office Supplies,.....	57.98		
Printing, Binding, etc.,.....	442.23		
Communication Service.			
Postage,.....	90.00		
Traveling Expenses,.....	105.27		
Miscellaneous Supplies and Expenses,.....	41.00		
		$6,423.16	
Operation.			
Salaries of Inspectors,.....	$22,266.80		
Transportation of Inspectors.			
Automobile Service.			
Operating Supplies,..... $788.81			
Repairs,..... 795.55			
Other Automobile Expenses,.. 50.00			
	1,634.36		
Carfare of Inspectors,.....	348.10		
Other Operating Supplies and Expenses,.....	34.17		
		24,283.43	
			$30,706.59

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CELEBRATIONS (Schedule 4).			
Armistice Day,		$360.00	
Christmas Eve.,		880.00	
Independence Day,		4,300.00	
Memorial Day,		2,247.96	
			$7,787.96
CHARITIES, DEPARTMENT OF (Schedule 5).			
Administration.			
Salary of Agent,	$2,400.00		
Salaries, Other Administrative Officers,	4,400.00		
Salaries and Wages, Permanent Administrative Employees,	5,819.03		
Stationery and Office Supplies,	171.08		
Printing, Binding, etc.,	361.90		
Communication Service.			
Postage,	42.00		
Telephone and Telegraph,	173.97		
Transportation Service.			
Freight, Express, and Cartage,	.42		
Carfares,	.14		
Automobile Supplies and Repairs,	815.79		
Fees, Commissions, and Premiums,	12.50		
Traveling Expenses,	173.81		
Miscellaneous Supplies and Expenses,	48.47		
		$14,419.11	
Almshouse.			
Administration.			
Salary of Superintendent,	$1,416.67		
Salary of Matron,	716.33		
Salaries of Chaplains,	383.33		
Stationery and Office Supplies,	67.75		
Printing, Binding, etc.,	79.83		
Communication Service.			
Postage,	9.33		
Telephone and Telegraph,	27.34		
Transportation Service.			
Freight, Express, and Cartage,	73.57		
Carfares,	20.12		
Heat, Light, and Power—Purchased,	477.49		
Miscellaneous Supplies and Expenses,	37.83		
		3,311.59	
Operation.			
Care of Inmates.			
Salaries, Nurses and Attendants,	$7,124.89		
Medical Supplies,	1,613.94		
Medical Attendance,	126.50		
Clothing, Dry Goods, etc.,	1,556.56		
Other Supplies and Expenses,	74.61		
		10,496.50	
Feeding Inmates and Employees.			
Salaries and Wages, Cooks, Bakers, etc.,	$1,349.11		
Provisions,	10,701.00		
		12,050.11	
Forward,		$40,277.31	

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Forward,.....		$40,277.31
CHARITIES, DEPARTMENT OF (Cont.).		
Almshouse (Cont.).		
Operation (Cont.).		
Housekeeping.		
Salaries and Wages,.....	$2,498.63	
Cleaning, Toilet, and Janitor Supplies,...	867.17	
		3,365.80
Laundry Services.		
Salaries and Wages,.....	$816.25	
Supplies,.....	154.01	
		970.26
Farm and Dairy.		
Salaries and Wages,.....	$2,571.20	
Supplies, Hay, Grain, etc.,.....	1,433.94	
		4,005.14
Heating and Lighting Plant.		
Salaries and Wages,.....	$3,751.48	
Fuel,.....	14,187.98	
Other Supplies,.....	572.67	
		18,512.13
Maintenance and Repairs.		
Of Equipment.		
Farm and Dairy,.....	$333.30	
Furniture and Household,.....	583.22	
Heating, Lighting, and Plumbing,.....	2,036.85	
Care of Animals,.....	580.17	
Of Buildings and Grounds,.....	3,380.08	
		6,913.62
Replacements.		
Of Equipment.		
Farm and Dairy,.....	$606.67	
Furniture and Household,.....	626.46	
Heating, Lighting, Plumbing,.....	433.67	
		1,666.80
Outside Relief.		
Care of Persons in Institutions,.....	$7,979.46	
Contributions to Persons,.....	32,712.23	
Payments to Cities and Towns,.....	3,482.55	
Transportation of Persons,.....	1,516.80	
Burials,.....	679.20	
Moving Household Furniture,.....	360.38	
Supplies Furnished.		
Fuel,..... $7,112.22		
Provisions,..... 36,985.93		
Medicines,..... 1,423.22		
Clothing,..... 6,401.11		
Other Expenses,..... 27.98		
	51,950.41	
		98,681.03
Forward,.....		$174,392.09

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Forward,		$174,392.09	
CHARITIES, DEPARTMENT OF (Cont.).			
Wayfarers' Lodge.			
Salaries and Wages,	$2,225.52		
Supplies,	587.94		
Wood,	4,688.92		
Other Expenses,	206.43		
		7,708.81	
		$182,100.90	
Less Transfers and Refunds,		9,055.98	
Total, Department of Charities,			$173,044.92
CITY AUDITOR (Schedule 6).			
Administration.			
Salary of City Auditor,		$4,133.32	
Salaries and Wages, Permanent Employees,		11,089.95	
Salaries and Wages, Temporary Employees,		256.78	
Stationery and Office Supplies,		346.33	
Printing, Binding, etc.,		608.38	
Advertising,		9.10	
Communication Service.			
Postage,		35.92	
Telephone,		18.20	
Traveling Expenses,		223.44	
Miscellaneous Supplies and Expenses,		129.69	
			$16,851.11
CITY CLERK (Schedule 7).			
Administration.			
Salary of City Clerk,		$3,866.68	
Salaries and Wages, Permanent Employees,		9,399.98	
Stationery and Office Supplies,		85.39	
Printing, Binding, etc.,		706.60	
Advertising,		2.66	
Communication Service.			
Postage,		159.25	
Telephone,		81.50	
Preparation of Vital Statistics,		2,227.50	
Miscellaneous Supplies and Expenses,		227.00	
			$16,756.56
CITY COLLECTOR (Schedule 8).			
Administration.			
Salary of City Collector,		$4,133.32	
Salaries and Wages, Permanent Employees,		17,119.08	
Salaries and Wages, Temporary Employees,		3,578.79	
Stationery and Office Supplies,		348.66	
Printing, Binding, etc.,		904.16	
Advertising,		1,409.60	
Communication Service.			
Postage,		3,697.07	
Telephone,		155.72	
Forward,		$31,346.35	

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Forward,.....		$31,346.35	
CITY COLLECTOR (Cont.).			
Administration (Cont.).			
Fees, Commissions, and Premiums,.....		960.50	
Traveling Expenses,.....		169.32	
Electric Safe Protection,.....		170.00	
Miscellaneous Supplies and Expenses,.....		266.82	
			$32,932.99
CITY COUNCIL (Schedule 9).			
Administration.			
Salaries and Wages, Permanent Employees,...		$2,700.00	
Stationery and Office Supplies,.....		5.40	
Printing, Binding, etc.,.....		368.57	
Advertising,.....		259.61	
Communication Service.			
Telephone,.....		111.50	
Fees, Commissions, Premiums,.....		107.65	
Miscellaneous Supplies and Expenses,.....		202.00	
Special Activities.			
Police Committee.			
Compensation of Counsel,.....	$750.00		
Services and Expenses of Investigators,....	1,487.88		
Stenographic Services,.....	492.94		
Traveling Expenses,.....	109.89		
Miscellaneous Expenses,.....	159.29		
		3,000.00	
Fuel Committee.			
Clerical Services,.....		10.00	
Municipal Garage Committee.			
Traveling Expenses,.....		72.01	
			$6,836.74
CITY PLANNING BOARD (Schedule 10).			
Engineering Services,.....		$7,500.00	
Experts' Services and Expenses,.....		1,412.96	
Stationery and Office Supplies,.....		91.06	
Printing, Binding, etc.,.....		17.90	
Traveling Expenses,.....		133.16	
Miscellaneous Supplies and Expenses,.....		80.70	
			$9,235.80
CITY TREASURER (Schedule 11).			
Administration.			
Salary of City Treasurer,.....		$4,433.32	
Salaries and Wages, Permanent Employees,...		11,483.30	
Salaries and Wages, Temporary Employees,..		200.00	
Stationery and Office Supplies,.....		259.06	
Printing, Binding, etc.,.....		292.26	
Communication Service.			
Postage,.....		166.19	
Telephone,.....		48.75	
Fees, Commissions, Premiums,.....		650.00	
Traveling Expenses,.....		204.91	
Replacement of Equipment,.....		207.00	
Miscellaneous Supplies and Expenses,.....		268.77	
			$18,213.56

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DAMAGES—LAND (Schedule 12).			
Dwight Road,		$500.00	
Hickory Street,		1,588.77	
			$2,088.77
DAMAGES—PERSONS AND PROPERTY (Schedule 13).			
Personal,		$3,751.10	
Property,		434.71	
			$4,185.81
ELECTIONS (Schedule 14).			
Salaries, Board of Registrars of Voters,		$1,916.44	
Salaries and Wages, Permanent Office Employees,		3,599.88	
Salaries and Wages, Assistant Registrars of Voters,		112.00	
Salaries and Wages, Precinct Officers,		2,520.00	
Salaries and Wages, Janitors,		259.50	
Stationery and Office Supplies,		113.20	
Printing, Binding, etc.,		7,082.35	
Advertising,		65.52	
Transportation Service.			
Freight, Express Cartage,		478.93	
Miscellaneous Supplies and Expenses,		343.02	
Rents and Privileges,		400.00	
			$16,896.84
FIRE DEPARTMENT (Schedule 15).			
Administration.			
Salary of Chief,		$3,966.66	
Salaries of Deputy Chief and District Chiefs,		18,866.70	
Salaries and Wages, Permanent Office Employees,		2,855.82	
Salaries and Wages, Temporary Office Employees,		166.28	
Stationery and Office Supplies,		99.12	
Printing, Binding, etc.,		708.90	
Communication Service.			
Postage,		19.81	
Traveling Expenses,		103.98	
Pensions,		4,834.45	
Miscellaneous Supplies and Expenses,		91.07	
			$31,712.24
Fire Protection.			
Station No. 1, Court Street.			
Salaries,	$54,217.61		
Clothing,	95.00		
Supplies,	316.16		
Laundry,	175.87		
Light,	209.64		
Chemical Supplies,	13.50		
Heat,	1,825.28		
Oil and Gasoline,	380.35		
Replacement of Equipment,	58.59		
Miscellaneous Supplies and Expenses,	146.73		
		$57,438.23	
Forward,		$57,438.23	$31,712.24

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Forward,.....		$57,438.23	$31,712.24
FIRE DEPARTMENT (Cont.).			
Fire Protection (Cont.).			
Station No. 2, North Street.			
Salaries,.....	$34,517.16		
Clothing,.....	168.05		
Supplies,.....	96.51		
Laundry,.....	98.30		
Light,.....	207.25		
Chemical Supplies,.....	6.75		
Heat,.....	2,099.18		
Oil and Gasoline,.....	690.66		
Replacement of Equipment,.....	270.06		
Miscellaneous Supplies and Expenses,.....	7.42		
		38,161.34	
Station No. 3, Oakland Street.			
Salaries,.....	$53,602.98		
Clothing,.....	20.00		
Supplies,.....	65.45		
Laundry,.....	113.48		
Light,.....	103.46		
Chemical Supplies,.....	6.75		
Heat,.....	860.02		
Oil and Gasoline,.....	181.05		
		54,953.19	
Station No. 4, Walnut Street.			
Salaries,.....	$54,883.36		
Clothing,.....	181.44		
Supplies,.....	120.41		
Laundry,.....	132.35		
Light,.....	77.77		
Chemical Supplies,.....	6.30		
Heat,.....	1,187.00		
Oil and Gasoline,.....	463.79		
Miscellaneous Supplies and Expenses,.....	55.30		
		57,107.72	
Station No. 5, Indian Orchard.			
Salaries,.....	$41,670.05		
Clothing,.....	20.00		
Supplies,.....	52.84		
Laundry,.....	97.78		
Light,.....	84.14		
Heat,.....	1,590.67		
Oil and Gasoline,.....	172.05		
Miscellaneous Supplies and Expenses,.....	60.00		
		43,747.53	
Forward,.....		$251,408.01	$31,712.24

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Forward,		$251,408.01	$31,712.24
Fire Department (Cont.).			
Fire Protection (Cont.).			
Station No. 6, Mill Street.			
Salaries,	$49,147.42		
Clothing,	30.00		
Supplies,	55.06		
Laundry,	75.96		
Light,	85.12		
Chemical Supplies,	6.75		
Heat,	1,197.61		
Oil and Gasoline,	85.70		
Miscellaneous Supplies and Expenses,	4.00		
		50,687.62	
Station No. 7, Chestnut Street.			
Salaries,	$48,329.72		
Clothing,	30.00		
Supplies,	98.15		
Laundry,	122.68		
Light,	75.67		
Chemical Supplies,	29.06		
Heat,	1,131.66		
Oil and Gasoline,	159.56		
Replacement of Equipment,	5.83		
Miscellaneous Supplies and Expenses,	30.00		
		50,012.33	
Station No. 8, Winchester Park.			
Salaries,	$56,466.17		
Clothing,	30.00		
Supplies,	72.88		
Laundry,	148.88		
Light,	132.10		
Chemical Supplies,	17.53		
Heat,	1,289.23		
Oil and Gasoline,	458.61		
Miscellaneous Supplies and Expenses,	139.94		
		58,755.34	
Station No. 9, Armory Street.			
Salaries,	$26,039.64		
Clothing,	10.00		
Supplies,	123.12		
Laundry,	63.01		
Light,	48.72		
Heat,	883.14		
Oil and Gasoline,	259.23		
Miscellaneous Supplies and Expenses,	11.00		
		27,437.86	
Forward,		$438,301.16	$31,712.24

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Forward,.....		$438,301.16	$31,712.24
FIRE DEPARTMENT (Cont.).			
Fire Protection (Cont.).			
Station No. 10, North Main Street.			
Salaries,.....	$49,393.08		
Clothing,.....	20.00		
Supplies,.....	59.16		
Laundry,.....	110.39		
Light,.....	130.43		
Chemical Supplies,.....	10.08		
Heat,.....	1,161.24		
Oil and Gasoline,.....	69.65		
Miscellaneous Supplies and Expenses,.....	120.59		
		51,074.62	
Station No. 11, Plainfield Street.			
Salaries,.....	$23,012.83		
Clothing,.....	10.00		
Supplies,.....	31.41		
Laundry,.....	41.26		
Light,.....	32.06		
Heat,.....	754.21		
Oil and Gasoline,.....	16.20		
Miscellaneous Supplies and Expenses,.....	5.00		
		23,902.97	
Station No. 12, Margaret Street.			
Salaries,.....	$26,318.89		
Clothing,.....	29.50		
Supplies,.....	113.64		
Laundry,.....	76.59		
Light,.....	56.35		
Heat,.....	752.45		
Replacement of Equipment,.....	26.05		
Oil and Gasoline,.....	244.21		
Miscellaneous Supplies and Expenses,.....	14.08		
		27,631 76	
Station No. 13, Pine Street.			
Salaries,.....	$49,388.31		
Clothing,.....	20.00		
Supplies,.....	51.46		
Laundry,.....	97.25		
Light,.....	94.42		
Chemical Supplies,.....	6.30		
Heat,.....	836.16		
Oil and Gasoline,.....	106.73		
Miscellaneous Supplies and Expenses,.....	89.59		
		50,690.22	
			591,600.73
Forward,.....			$623,312.97

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Forward,.....			$623,312.97
FIRE DEPARTMENT (Cont.).			
Fire Protection (Cont.).			
Fire Alarm Telegraph Bureau.			
Salary, Superintendent,.....		$1,966.66	
Salaries and Wages, Permanent Employees,		15,224.62	
Pensions,.....		2,226.24	
Repairs and Replacements,.....		3,146.43	
			22,563.95
Maintenance and Repairs.			
Apparatus.			
Station No. 1, Court Street,.....	$608.45		
Station No. 2, North Street,.....	620.79		
Station No. 4, Walnut Street,.....	1,250.31		
Station No. 5, Indian Orchard,.....	814.22		
Station No. 6, Mill Street,.....	3.87		
Station No. 7, Chestnut Street,.....	890.95		
Station No. 8, Winchester Park,.....	1,695.43		
Station No. 9, Armory Street,.....	6.44		
Station No. 10, North Main Street,.....	1,198.88		
Station No. 12, Margaret Street,.....	637.90		
Station No. 13, Pine Street,.....	60.73		
Undistributed,.....	3,647.26		
		$11,430.23	
Buildings and Grounds.			
Station No. 1, Court Street,.....	$238.01		
Station No. 2, North Street,.....	1,104.25		
Station No. 3, Oakland Street,.....	99.10		
Station No. 4, Walnut Street,.....	885.08		
Station No. 5, Indian Orchard,.....	64.42		
Station No. 6, Mill Street,.....	367.84		
Station No. 7, Chestnut Street,.....	28.71		
Station No. 8, Winchester Park,.....	498.09		
Station No. 9, Armory Street,.....	637.99		
Station No. 10, North Main Street,.....	877.31		
Station No. 11, Plainfield Street,.....	51.21		
Station No. 12, Margaret Street,.....	236.37		
Station No. 13, Pine Street,.....	116.81		
Undistributed,.....	258.20		
		5,463.39	
			16,893.62
			$662,770.54
General Expense.			
Supplies,.....		$1,701.28	
Telephone Service,.....		939.96	
Clothing,.....		371.75	
Chemical Supplies,.....		89.60	
Replacement of Equipment,.....		5,022.49	
Oil and Gasoline,.....		52.58	
			8,177.66
			$670,948.20
Less Transfers and Refunds,.....			460.00
Total, Fire Department,.....			$670,488.20

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Fish Warden (Schedule 16).			
Salary of Fish Warden,.....			$25.00
Forest Warden (Schedule 17).			
Salary of Forest Warden,.....			$100.00
Health Department (Schedule 18).			
Administration.			
Salary of Agent,.....	$2,766.64		
Salaries and Wages, Permanent Office Employees,.....	5,691.47		
Salaries and Wages, Temporary Office Employees,.....	24.50		
Stationery and Office Supplies,.....	151.31		
Printing, Binding, etc.,.....	389.00		
Communication Service.			
Postage,.....	85.00		
Telephone,.....	218.95		
Transportation Service.			
Freight, Express, and Cartage,.....	26.83		
Traveling Expenses,.....	87.58		
Miscellaneous Supplies and Expenses,.....	105.75		$9,547.03
Operation.			
Sanitary Inspection.			
Salaries of Inspectors,.....	$12,531.10		
Other Expenses,.....	491.00		
		$13,022.10	
Medical Inspection of School Children.			
Salaries, Inspectors and Nurses,.....	$20,784.24		
Supplies,.....	59.16		
Other Expenses,.....	993.74		
		21,837.14	
Milk and Dairy Inspection.			
Salaries, Inspectors,.....	$3,899.88		
Other Expenses,.....	570.07		
		4,469.95	
Food Inspection.			
Salaries, Inspectors,.....	$1,500.00		
Other Expenses,.....	200.00		
		1,700.00	
Laboratory Service.			
Salaries and Wages,.....	$2,733.28		
Laboratory Supplies,.....	106.88		
Rent,.....	1,020.00		
Other Expenses,.....	632.47		
		4,492.63	
Operating Supplies Not Chargeable Elsewhere.			
Disinfectants,.....		243.51	
Forward,.....		$45,765.33	$9,547.03

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Forward,.....		$45,765.33	$9,547.08
HEALTH DEPARTMENT (Cont.).			
Operation (Cont.).			
Tuberculosis Dispensary.			
Salaries,.....	$2,733.27		
Supplies,.....	50.50		
Rent,.....	660.00		
Other Expenses,.....	554.14		
		3,997.91	
Dental Clinic.			
Salaries,.....	$5,430.00		
Supplies,.....	327.73		
Other Expenses,.....	917.12		
		6,674.85	56,438.09
Division of Hospitals.			
Administration.			
Salary, Matron,.....	$1,399.91		
Stationery and Office Supplies,.....	26.69		
Printing, Binding, etc.,.....	54.43		
Communication Service.			
Postage,.....	3.00		
Telephone and Telegraph,.....	14.55		
Transportation Service.			
Freight, Express, and Cartage,.....	102.99		
Ambulance Service,.....	609.95		
Heat, Light, and Power,.....	8,502 22		
Miscellaneous Supplies and Expenses,.....	13.95		
		10,727.69	
Professional Care of Patients.			
Salaries and Wages,.....	$12,506.29		
Medical and Surgical Supplies,.....	1,553.31		
Other Expenses,.....	843.45		
		14,903.05	
Feeding Patients and Employees.			
Salaries and Wages,.....	$1,200.00		
Provisions,.....	11,861.59		
		13,061.59	
Housekeeping.			
Household Supplies,.....	$912.87		
Other Expenses,.....	102.83		
		1,015.70	
Laundry Service.			
Other Expenses,.....		1,481.16	
Supplies Not Chargeable Elsewhere.			
Fuel,.....	$699.55		
Disinfectants,.....	149.92		
		849.47	
Maintenance and Repairs.			
Hospital Equipment,.....		13.73	
Building Equipment.			
Lighting System,.....	$25.59		
Heating System,.....	1.30		
Plumbing System,.....	28.60		
		55.49	
Forward,.....		$42,107.88	$65,985.12

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Forward,.....		$42,107.88	$65,965.12
HEALTH DEPARTMENT (Cont.).			
Maintenance and Repairs (Cont.).			
Buildings and Real Property.			
Buildings,.....	$324.53		
Grounds,.....	20.22		
		344.75	
Replacements.			
Hospital Equipment.			
Household Furnishings,.....		279.62	
			$42,732.25
Payments to Other Hospitals,.....			6,019.18
Total, Health Department,.....			$114,736.55
LAW DEPARTMENT (Schedule 19).			
Administration.			
Salary of City Solicitor,.....		$4,500.00	
Salary of Assistant City Solicitor,.....		2,250.00	
Salaries and Wages, Permanent Employees,...		1,466.64	
Appraisals,.....		2,782.52	
Stationery and Office Supplies,.....		225.78	
Printing, Binding, etc.,.....		243.16	
Communication Service.			
Postage,.....		12.49	
Telephone and Telegraph,.....		30.63	
Traveling Expenses,.....		30.50	
Fees, Commissions, and Premiums,.....		289.00	
Vacations and Other Lost Time,.....		50.00	
Miscellaneous Supplies and Expenses,.....		129.51	
			$12,010.23
LICENSE COMMISSIONERS, BOARD OF (Schedule 20).			
Administration.			
Salary of Chairman,.....		$250.00	
Salaries and Wages, Other Employees,.....		310.00	
Printing, Binding, etc.,.....		66.05	
Advertising,.....		21.74	
Communication Service.			
Postage,.....		10.75	
			$658.54
MAYOR (Schedule 21).			
Administration.			
Salary of Mayor,.....		$5,833.33	
Salaries and Wages, Permanent Office Employees,.....		1,574.97	
Stationery and Office Supplies,.....		62.00	
Forward,.....		$7,470.30	

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Forward,.....		$7,470.30	
Mayor (Cont.).			
Administration (Cont.).			
Printing, Binding, etc.,.....		232.47	
Communication Service.			
Postage,.....		40.00	
Telephone and Telegraph,.....		36.22	
Entertainment,.....		98.60	
Traveling Expenses,.....		83.07	
Vacations and Other Lost Time,.....		36.00	
Miscellaneous Supplies and Expenses,.....		203.50	
Automobile Service.			
Wages, Chauffeur,.....	$734.22		
Supplies and Repairs,.....	744.25		
		1,478.47	
			$9,678.63
Municipal Debt (Schedule 22).			
Principal.			
City Debt Serials,.....		$436,500.00	
Interest.			
City Debt,.....	$347,196.43		
Temporary Loans,.....	123,011.42		
Trust Funds,.....	179.69		
		470,387.54	
Sinking Funds.			
City Debt,.....		28,000.00	
			$934,887.54
Police Department (Schedule 23).			
Administration.			
Salary of Chief,.....		$3,889.08	
Salaries and Wages, Permanent Administrative Employees,.....		8,691.80	
Stationery and Office Supplies,.....		1,138.62	
Printing, Binding, etc.,.....		1,448.59	
Advertising,.....		136.05	
Communication Service.			
Postage,.....		107.56	
Telephone and Telegraph,.....		2,254.94	
Transportation Service.			
Freight, Express, and Cartage,.....		59.92	
Fees, Commissions, and Premiums,.....		1,874.34	
Traveling Expenses, Outside City,.....		1,918.89	
Heat, Light, and Power,.....		3,958.44	
Rents and Privileges,.....		8.00	
Pensions,.....		11,161.68	
Vacations and Other Lost Time,.....		8,575.85	
Miscellaneous Supplies and Expenses,.....		505.77	
			$45,729.53

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Forward,			**$45,729.53**
Police Department (Cont.).			
Operation.			
Policing the City.			
Salaries, Officers and Patrolmen,	$302,136.49		
Other Expenses,	189.41		
		$302,325.90	
Detection of Crime.			
Salaries,	$30,671.67		
Bertillon Supplies,	74.24		
Other Expenses,	24.34		
		30,770.25	
Police Patrol Service.			
Salaries, Chauffeur Officers,	$12,145.00		
Indian Orchard Station,	303.00		
		12,448.00	
Motor Vehicle Service.			
Operating Supplies,	$2,864.20		
Repairs and Replacements,	2,290.93		
		5,155.13	
Police Court.			
Salary, Prosecuting Attorney,	$2,243.80		
Salary, Officers Detailed,	3,764.28		
		6,008.08	
Detention and Care of Prisoners.			
Salaries and Wages,	$11,245.76		
Provisions,	811.70		
Other Expenses,	75.61		
		12,133.07	
Police Signal System.			
Salaries and Wages,	$598.00		
Supplies,	937.01		
Repairs and Replacements,	240.65		
		1,775.66	
Care of Buildings and Equipment.			
Salaries and Wages, Janitors, etc.,	$4,322.68		
Cleaning, Toilet, and Janitors' Supplies,	712.50		
Laundry,	154.50		
Fuel,	62.33		
		5,252.01	
Supplies Used Generally.			
Wearing Apparel,	$14,477.02		
Tailors' Services,	509.60		
Ammunition,	2.00		
Medical,	41.68		
Badges and Plates,	619.47		
Other,	520.38		
		16,170.15	
Forward,		**$392,038.25**	**$45,729.53**

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Forward,.....		$392,038.25	$45,729.53
POLICE DEPARTMENT (Cont.).			
Operation. (Cont.).			
Maintenance and Repairs.			
Equipment.			
Bicycles and Accessories,.....	$251.60		
Small Side Arms,.....	19.83		
Office Furniture and Equipment,.....	280.86		
		552.29	
Buildings and Grounds.			
Central Station,.....	$1,988.61		
Indian Orchard,.....	61.53		
		2,050.14	
Replacements.			
Motor Vehicles,.....	$1,851.54		
Bicycles and Accessories,.....	311.50		
Office Furniture and Equipment,.....	617.43		
Other,.....	168.53		
		2,949.00	
			397,589.68
			$443,319.21
Less Transfers and Refunds,.....			93.00
Total, Police Department,.....			$443,226.21
PREMIUM ON BONDS (Schedule 24).			
Miscellaneous Expenses of Bond Issues,.....			$2,528.41
PRINTING, COMMITTEE ON (Schedule 25).			
Administration.			
Salaries of Printing Expert,.....		$750.00	
Services in Preparing Budget,.....		197.85	
Stationery and Office Supplies,.....		95.69	
Printing, Binding, etc.,.....		5,050.77	
Miscellaneous Supplies and Expenses,.....		12.60	
			$6,106.71
PUBLIC BUILDINGS, DEPARTMENT OF (Schedule 26).			
Administration.			
Salary, Superintendent,.....		$3,456.69	
Salaries and Wages, Permanent Employees,...		4,214.89	
Salary and Wages, Temporary Employees,...		1,575.00	
Stationery and Office Supplies,.....		158.36	
Printing, Binding, etc.,.....		134.34	
Advertising,.....		37.13	
Communication Service.			
Postage,.....		129.90	
Telephone and Telegraph,.....		81.57	
Forward,.....		$9,787.88	

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Forward,.....		$9,787.88	
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Administration (Cont.).			
Traveling Expenses,.....		40.50	
Fees, Commissions, and Premiums,.....		52.20	
Pensions,.....		621.40	
Miscellaneous Supplies and Expenses,.....		5.95	
			$10,507.93
Operation.			
Transportation Service.			
Freight, Express, and Cartage,.....		$434.25	
Carfares,.....		474.18	
Motor Vehicles Service.			
Salaries of Chauffeurs,.....		3,080.86	
Supplies,.....		948.31	
Repairs on Vehicles,.....		171.64	
Vacations and Other Lost Time,.....		1,651.04	
			6,760.30
Schoolhouse Property.			
Acushnet Avenue School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,119.66		
Fuel, Light, and Power,.....	3,649.38		
Janitors' Supplies,.....	43.64		
Miscellaneous Supplies and Expenses,....	100.09		
		$5,912.77	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$168.79		
Electrical Equipment,.....	97.28		
Heating, Plumbing, and Ventilating,.....	373.82		
Building and Grounds,.....	746.76		
		1,386.65	
Alden Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,308.00		
Fuel, Light, and Power,.....	424.38		
Janitors' Supplies,.....	22.97		
Miscellaneous Supplies and Expenses,....	19.97		
		1,775.32	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$14.87		
Electrical Equipment,.....	104.48		
Heating, Plumbing, and Ventilating,.....	220.16		
Building and Grounds,.....	262.32		
		601.83	
Forward,.....		$9,676.57	$17,268.23

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Forward,		$9,676.17	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Armory Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,	$3,478.44		
Fuel, Light, and Power,	4,166.98		
Janitors' Supplies,	80.50		
Miscellaneous Supplies and Expenses,	329.73		
		8,055.65	
Maintenance and Repairs.			
Furniture and Fixtures,	$354.89		
Electrical Equipment,	325.27		
Heating, Plumbing, and Ventilating,	638.71		
Building and Grounds,	1,955.54		
		3,274.41	
Barrows School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,	$2,016.05		
Fuel, Light, and Power,	2,322.72		
Janitors' Supplies,	49.67		
Miscellaneous Supplies and Expenses,	84.38		
		4,472.82	
Maintenance and Repairs.			
Furniture and Fixtures,	$17.12		
Electrical Equipment,	92.69		
Heating, Plumbing, and Ventilating,	316.04		
Building and Grounds,	705.25		
		1,131.10	
Boston Road School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,	$1,289.60		
Fuel, Light, and Power,	776.28		
Janitors' Supplies,	14.43		
Miscellaneous Supplies and Expenses,	2.20		
		2,082.51	
Maintenance and Repairs.			
Furniture and Fixtures,	$206.45		
Electrical Equipment,	112.52		
Heating, Plumbing, and Ventilating,	400.87		
Building and Grounds,	563.75		
Portable School,	785.74		
		2,069.33	
Forward,		$30,762.89	$17,268.23

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Forward,.....		$30,762.39	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Brightwood School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$3,079.38		
Fuel, Light, and Power,.....	1,957.95		
Janitors' Supplies,.....	59.26		
Miscellaneous Supplies and Expenses,....	214.79		
		5,311.38	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$128.42		
Electrical Equipment,.....	217.96		
Heating, Plumbing, and Ventilating,.....	646.78		
Building and Grounds,.....	1,033.83		
		2,021.99	
Buckingham School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$5,387.37		
Fuel, Light, and Power,.....	4,355.16		
Janitors' Supplies,.....	155.63		
Miscellaneous Supplies and Expenses,....	232.21		
		10,080.37	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$266.60		
Electrical Equipment,.....	636.96		
Heating, Plumbing, and Ventilating,.....	965.50		
Building and Grounds,.....	999.41		
		2,868.47	
Carew Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,458.40		
Fuel, Light, and Power,.....	1,941.28		
Janitors' Supplies,.....	73.12		
Miscellaneous Supplies and Expenses,....	144.86		
		4,617.66	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$202.36		
Electrical Equipment,.....	70.19		
Heating, Plumbing, and Ventilating,.....	167.46		
Building and Grounds,.....	1,165.93		
		1,605.94	
Central Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$3,096.79		
Fuel, Light, and Power,.....	4,332.63		
Janitors' Supplies,.....	103.54		
Miscellaneous Supplies and Expenses,....	271.90		
		7,804.86	
Forward,.....		$65,073.06	$17,268.23

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Forward,.....		$65,073.06	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Maintenance and Repairs.			
Furniture and Fixtures,.....	$102.61		
Electrical Equipment,.....	181.43		
Heating, Plumbing, and Ventilating,.....	243.36		
Building and Grounds,.....	1,756.46		
		2,283.86	
374 Central Street.			
Care and Operation.			
Fuel, Light, and Power,.....		383.39	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$7.80		
Electrical Equipment,.....	4.45		
Heating, Plumbing, and Ventilating,.....	77.55		
Building and Grounds,.....	146.13		
		235.93	
Charles Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,289.60		
Fuel, Light, and Power,.....	421.30		
Janitors' Supplies,.....	37.71		
Miscellaneous Supplies and Expenses,....	22.85		
		1,771.46	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$31.84		
Electrical Equipment,.....	27.43		
Heating, Plumbing, and Ventilating,.....	24.21		
Building and Grounds,.....	286.66		
		370.14	
Chestnut Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$9,588.39		
Fuel, Light, and Power,.....	10,728.97		
Janitors' Supplies,.....	178.43		
Miscellaneous Supplies and Expenses,....	356.46		
		20,852.25	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$415.59		
Electrical Equipment,.....	506.73		
Heating, Plumbing, and Ventilating,.....	933.85		
Building and Grounds,.....	2,186.54		
		4,042.71	
Forward,.....		$95,012.71	$17,268.23

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Forward,.....		$95,012.71	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Dry Bridge School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$624.00		
Fuel, Light, and Power,.....	123.26		
Janitors' Supplies,.....	10.32		
Taxes and Water Rents,.....	35.56		
		793.14	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$0.45		
Heating, Plumbing, and Ventilating,.....	14.15		
Building and Grounds,.....	25.54		
		40.14	
Eastern Avenue School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,700.16		
Fuel, Light, and Power,.....	1,263.61		
Janitors' Supplies,.....	32.52		
Miscellaneous Supplies and Expenses,....	33.82		
		3,030.11	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$67.00		
Electrical Equipment,.....	43.46		
Heating, Plumbing, and Ventilating,.....	155.36		
Building and Grounds,.....	359.17		
		624.99	
East Springfield School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$962.00		
Fuel, Light, and Power,.....	184.21		
Janitors' Supplies,.....	13.70		
		1,159.91	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$20.03		
Heating, Plumbing, and Ventilating,.....	50.59		
Building and Grounds,.....	108.41		
		179.03	
East Union Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,861.59		
Fuel, Light, and Power,.....	2,017.00		
Janitors' Supplies,.....	35.13		
Miscellaneous Supplies and Expenses,....	28.73		
		3,942.45	
Forward,.....		$104,782.48	$17,268.23

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Forward,		$104,782.48	$17,268.28
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Maintenance and Repairs.			
Furniture and Fixtures,	$94.77		
Electrical Equipment,	70.41		
Heating, Plumbing, and Ventilating,	125.92		
Building and Grounds,	474.90		
		766.00	
Emery Street Shop and Storehouse.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,	$3,188.72		
Fuel, Light, and Power,	1,839.85		
Janitors' Supplies,	58.92		
Miscellaneous Supplies and Expenses,	12.28		
		5,099.77	
Maintenance and Repairs.			
Furniture and Fixtures,	$229.83		
Electrical Equipment,	258.21		
Heating, Plumbing, and Ventilating,	28.46		
Tools,	674.36		
Building and Grounds,	608.61		
		1,799.52	
Five Mile Pond School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,	$907.40		
Fuel, Light, and Power,	188.22		
Janitors' Supplies,	8.35		
		1,103.97	
Maintenance and Repairs.			
Furniture and Fixtures,	$19.47		
Heating, Plumbing, and Ventilating,	52.71		
Building and Grounds,	73.02		
		145.20	
Forest Park School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,	$10,487.35		
Fuel, Light, and Power,	10,605.76		
Janitors' Supplies,	282.74		
Miscellaneous Supplies and Expenses,	786.53		
		22,162.38	
Maintenance and Repairs.			
Furniture and Fixtures,	$822.58		
Electrical Equipment,	857.47		
Heating, Plumbing, and Ventilating,	407.71		
Building and Grounds,	1,376.43		
		3,464.19	
Forward,		$139,328.51	$17,268.28

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Forward,.....		$139,323.51	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Glenwood School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,298.32		
Fuel, Light, and Power,.....	576.54		
Janitors' Supplies,.....	19.90		
Miscellaneous Supplies and Expenses,....	9.58		
		1,904.34	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$128.60		
Electrical Equipment,.....	19.05		
Heating, Plumbing, and Ventilating,.....	10.94		
Building and Grounds,.....	126.21		
		284.80	
Central High School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$11,669.63		
Fuel, Light, and Power,.....	5,069.07		
Janitors' Supplies,.....	171.68		
Engineering Supplies,.....	235.10		
Miscellaneous Supplies and Expenses,....	169.30		
		17,314.78	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$668.97		
Electrical Equipment,.....	673.11		
Heating, Plumbing, and Ventilating,.....	540.27		
Building and Grounds,.....	1,739.78		
		3,622.13	
High School of Commerce.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$23,912.68		
Fuel, Light, and Power,.....	8,074.52		
Janitors' Supplies,.....	367.25		
Engineering Supplies,.....	395.47		
Miscellaneous Supplies and Expenses,....	405.95		
		33,155.87	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$525.36		
Electrical Equipment,.....	643.30		
Heating, Plumbing, and Ventilating,.....	373.12		
Building and Grounds,.....	892.67		
		2,434.45	
Forward,.....		$196,039.88	$17,268.23

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Forward,.....		$198,039.88	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Technical High School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$13,784.42		
Fuel, Light, and Power,.....	9,073.90		
Janitors' Supplies,.....	396.77		
Engineering Supplies,.....	287.93		
Miscellaneous Supplies and Expenses,....	303.13		
		23,846.15	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$569.36		
Electrical Equipment,.....	756.53		
Heating, Plumbing, and Ventilating,.....	779.17		
Building and Grounds,.....	1,705.12		
		3,810.18	
Homer Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$4,580.43		
Fuel, Light, and Power,.....	2,480.99		
Janitors' Supplies,.....	66.44		
Miscellaneous Supplies and Expenses,....	146.19		
		7,274.05	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$567.85		
Electrical Equipment,.....	224.76		
Heating, Plumbing, and Ventilating,.....	331.74		
Building and Grounds,.....	594.78		
		1,719.13	
Hooker School (New).			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$5,532.23		
Fuel, Light, and Power,.....	3,205.63		
Janitors' Supplies,.....	78.09		
Miscellaneous Supplies and Expenses,....	193.61		
		9,009.56	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$94.28		
Electrical Equipment,.....	168.68		
Heating, Plumbing, and Ventilating,.....	989.45		
Building and Grounds,.....	586.41		
		1,838.82	
Hooker School (Old).			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$3,187.67		
Fuel, Light, and Power,.....	2,710.18		
Janitors' Supplies,.....	113.33		
Miscellaneous Supplies and Expenses,....	117.18		
		6,078.36	
Forward,.....		$251,616.13	$17,268.23

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Forward,.....		$251,616.13	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Maintenance and Repairs.			
Furniture and Fixtures,.....	$713.67		
Electrical Equipment,.....	762.58		
Heating, Plumbing, and Ventilating,.....	4,782.13		
Building and Grounds,.....	2,446.15		
		8,704.53	
Howard Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$4,596.59		
Fuel, Light, and Power,.....	3,073.49		
Janitors' Supplies,.....	139.90		
Miscellaneous Supplies and Expenses,....	161.77		
		7,971.75	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$350.40		
Electrical Equipment,.....	350.54		
Heating, Plumbing, and Ventilating,.....	454.04		
Building and Grounds,.....	1,280.95		
		2,435.93	
Indian Orchard Grammar School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$4,635.10		
Fuel, Light, and Power,.....	6,893.68		
Janitors' Supplies,.....	96.40		
Miscellaneous Supplies and Expenses,....	157.00		
		11,782.18	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$322.03		
Electrical Equipment,.....	509.29		
Heating, Plumbing, and Ventilating,.....	906.22		
Building and Grounds,.....	766.52		
		2,504.06	
Indian Orchard Primary School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,601.52		
Fuel, Light, and Power,.....	1,388.00		
Janitors' Supplies,.....	27.96		
Miscellaneous Supplies and Expenses,....	44.14		
		3,061.62	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$100.17		
Electrical Equipment,.....	24.59		
Heating, Plumbing, and Ventilating,.....	410.76		
Building and Grounds,.....	307.23		
		842.75	
Forward,.....		$288,918.95	$17,268.23

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Forward,.....		$288,918.96	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Jefferson Avenue School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,029.92		
Fuel, Light, and Power,.....	1,721.72		
Janitors' Supplies,.....	52.35		
Miscellaneous Supplies and Expenses,....	68.33		
		3,872.32	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$126.91		
Electrical Equipment,.....	60.57		
Heating, Plumbing, and Ventilating,.....	80.92		
Building and Grounds,.....	240.41		
		508.81	
Kensington Avenue School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,937.80		
Fuel, Light, and Power,.....	1,240.40		
Janitors' Supplies,.....	70.96		
Miscellaneous Supplies and Expenses,....	257.89		
		4,507.07	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$106.56		
Electrical Equipment,.....	731.59		
Heating, Plumbing, and Ventilating,.....	68.99		
Building and Grounds,.....	589.15		
		1,496.29	
Liberty School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,752.16		
Fuel, Light, and Power,.....	2,010.42		
Janitors' Supplies,.....	39.23		
Miscellaneous Supplies and Expenses,....	44.32		
		3,846.13	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$123.66		
Electrical Equipment,.....	58.16		
Heating, Plumbing, and Ventilating,.....	14.07		
Building and Grounds,.....	365.61		
		561.50	
Lincoln School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,452.63		
Fuel, Light, and Power,.....	1,482.14		
Janitors' Supplies,.....	133.62		
Miscellaneous Supplies and Expenses,....	314.58		
		4,382.97	
Forward,.....		$308,094.04	$17,268.23

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Forward,.....		$308,094.04	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Maintenance and Repairs.			
Furniture and Fixtures,.....	$171.92		
Electrical Equipment,.....	153.60		
Heating, Plumbing, and Ventilating,.....	511.22		
Building and Grounds,.....	661.14		
		1,497.88	
Rushville School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,004.00		
Fuel, Light, and Power,.....	349.85		
Janitors' Supplies,.....	5.67		
Miscellaneous Supplies and Expenses,.....	7.32		
		1,366.84	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$87.63		
Electrical Equipment,.....	193.78		
Heating, Plumbing, and Ventilating,.....	364.20		
Building and Grounds,.....	880.04		
Portable School,.....	592.86		
		2,118.51	
School Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,271.24		
Fuel, Light, and Power,.....	1,562.57		
Janitors' Supplies,.....	32.05		
Miscellaneous Supplies and Expenses,.....	32.40		
		2,918.26	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$111.10		
Electrical Equipment,.....	5.97		
Heating, Plumbing, and Ventilating,.....	336.16		
Building and Grounds,.....	498.13		
		951.36	
Sixteen Acres School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$907.40		
Fuel, Light, and Power,.....	160.33		
Janitors' Supplies,.....	5.87		
Miscellaneous Supplies and Expenses,.....	3.66		
		1,077.26	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$81.69		
Electrical Equipment,.....	.85		
Heating, Plumbing, and Ventilating,.....	39.62		
Building and Grounds,.....	44.90		
		167.06	
Forward,.....		$318,191.21	$17,268.23

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Forward,.....		$318,191.21	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
State Street Grammar School.			
Care and Operation.			
Fuel, Light, and Power,.....	$145.53		
Miscellaneous Supplies and Expenses,....	87.00		
		232.53	
Maintenance and Repairs.			
Salvaging Material,.....	$478.09		
Building and Grounds,.....	1.25		
		479.34	
Strickland School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,572.69		
Fuel, Light, and Power,.....	1,171.31		
Janitors' Supplies,.....	44.20		
Miscellaneous Supplies and Expenses,....	51.26		
		2,839.46	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$113.02		
Electrical Equipment,.....	77.46		
Heating, Plumbing, and Ventilating,.....	75.37		
Building and Grounds,.....	363.24		
		629.09	
Sumner Avenue School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,064.57		
Fuel, Light, and Power,.....	1,077.05		
Janitors' Supplies,.....	121.38		
Miscellaneous Supplies and Expenses,....	210.71		
		3,473.71	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$148.61		
Electrical Equipment,.....	189.76		
Heating, Plumbing, and Ventilating,.....	14.69		
Building and Grounds,.....	477.77		
		825.83	
Tapley School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,343.56		
Fuel, Light, and Power,.....	2,095.37		
Janitors' Supplies,.....	75.80		
Miscellaneous Supplies and Expenses,....	97.45		
		4,612.18	
Forward,.....		$331,283.35	$17,268.23

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Forward,.....		$331,?83.85	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Maintenance and Repairs.			
Furniture and Fixtures,.....	$142.81		
Electrical Equipment,.....	83.36		
Heating, Plumbing, and Ventilating,.....	132.11		
Building and Grounds,.....	968.72		
		1,327.00	
Vocational School (New).			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,347.76		
Fuel, Light, and Power,.....	807.03		
Janitors' Supplies,.....	127.15		
Miscellaneous Supplies and Expenses,.....	95.60		
		3,377.54	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$13.57		
Electrical Equipment,.....	75.16		
Heating, Plumbing, and Ventilating,.....	129.05		
Building and Grounds,.....	304.96		
		522.74	
Vocational School (Old).			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$909.54		
Fuel, Light, and Power,.....	1,389.20		
Miscellaneous Supplies and Expenses,.....	75.00		
		2,373.74	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$403.88		
Electrical Equipment,.....	149.84		
Heating, Plumbing, and Ventilating,.....	23.36		
Building and Grounds,.....	30.02		
		607.10	
Washington School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,331.03		
Fuel, Light, and Power,.....	1,352.93		
Janitors' Supplies,.....	56.27		
Miscellaneous Supplies and Expenses,.....	219.39		
		3,959.62	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$96.65		
Electrical Equipment,.....	169.13		
Heating, Plumbing, and Ventilating,.....	159.09		
Building and Grounds,.....	1,439.80		
		1,864.67	
Forward,.....		$345,315.76	$17,268.23

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Forward,.....		$345,315.76	$17,268.22
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
White Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$1,915.73		
Fuel, Light, and Power,.....	1,538.37		
Janitors' Supplies,.....	53.22		
Miscellaneous Supplies and Expenses,....	239.21		
		3,746.53	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$33.58		
Electrical Equipment,.....	51.82		
Heating, Plumbing, and Ventilating,.....	53.09		
Building and Grounds,.....	197.38		
Portable School,.....	15.84		
		351.71	
Wight House, Indian Orchard.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$180.48		
Fuel, Light, and Power,.....	180.59		
Janitors' Supplies,.....	1.95		
Miscellaneous Supplies and Expenses,....	33.70		
		396.72	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$81.38		
Electrical Equipment,.....	316.48		
Heating,.....	2,794.73		
Building and Grounds,.....	4,050.84		
		7,243.43	
William Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,031.60		
Fuel, Light, and Power,.....	2,363.44		
Janitors' Supplies,.....	62.88		
Miscellaneous Supplies and Expenses,....	121.32		
		4,579.24	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$199.26		
Electrical Equipment,.....	241.28		
Heating, Plumbing, and Ventilating,.....	226.32		
Building and Grounds,.....	880.13		
		1,546.99	
Worthington Street School.			
Care and Operation.			
Salaries and Wages, Janitors, Engineers, and Firemen,.....	$2,541.06		
Fuel, Light, and Power,.....	3,375.87		
Janitors' Supplies,.....	77.50		
Miscellaneous Supplies and Expenses,....	142.37		
		6,136.80	
Forward,.....		$369,317.18	$17,268.22

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Forward,.....		$369,317.18	$17,268.23
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Schoolhouse Property (Cont.).			
Maintenance and Repairs.			
Furniture and Fixtures,.....	$207.16		
Electrical Equipment,.....	155.16		
Heating, Plumbing, and Ventilating,.....	688.61		
Building and Grounds,.....	1,448.19		
		2,499.12	
47 Vernon Street.			
Care and Operation.			
Miscellaneous Supplies and Expenses,....		11.27	
Carlisle School.			
Care and Operation.			
Miscellaneous Supplies and Expenses,....		31.50	
Rented Property.			
Care and Operation.			
Taxes and Water Rents,.....	$52.34		
Miscellaneous Supplies and Expenses,....	29.28		
		81.62	
Maintenance and Repairs.			
Building and Grounds,.....		91.14	
Undistributed.			
Maintenance and Repairs.			
Furniture and Fixtures,.....		935.80	
			372,967.63
Militia Rifle Range.			
Operation.			
Salaries and Wages,.....	$312.00		
Taxes and Water Rents,.....	222.55		
		$534.55	
Maintenance and Repairs.			
Building and Grounds,.....		680.58	
			$1,215.13
Municipal Group Buildings.			
Administration Building.			
Operation.			
Salaries and Wages, Janitors and Cleaners,	$26,393.23		
Communication Service.			
Telephone and Telegraph,.....	1,316.05		
Transportation Service.			
Freight, Express, and Cartage,.....	90.81		
Light and Power,.....	2,411.75		
Janitors' Supplies,.....	1,297.00		
Mechanics' and Engineers' Supplies,.....	97.52		
Snow Shoveling,.....	624.30		
Laundry Service,.....	369.43		
Window Cleaning,.....	606.96		
Care of Vaults,.....	150.00		
Ice,.....	556.00		
Miscellaneous Supplies and Expenses,....	77.35		
		33,990.40	
Forward,.....		$33,990.40	$391,450.99

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Forward,.....		$36,990.40	$391,450.99
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).			
Municipal Group Buildings (Cont.).			
Maintenance and Repairs (Cont.).			
Furniture and Fixtures,.....	$764.55		
Electrical Equipment,.....	705.91		
Heating, Plumbing, and Ventilating,.....	54.41		
Building and Grounds,.....	2,552.67		
		4,077.54	
			38,067.94
Auditorium.			
Operation.			
Salaries and Wages, Janitors,.....	$8,209.39		
Light and Power,.....	2,288.75		
Janitors' Supplies,.....	566.46		
Mechanics' and Engineers' Supplies,.....	35.00		
Care of Organ,.....	468.11		
Moving Seats,.....	453.10		
		$12,020.81	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$165.55		
Electrical Equipment,.....	833.76		
Heating, Plumbing, and Ventilating,.....	11.82		
Building and Grounds,.....	1,090.50		
		2,101.63	
			14,122.44
Campanile.			
Operation.			
Salary, Chime Ringer,.....	$398.84		
Light and Power,.....	810.08		
Mechanics' and Engineers' Supplies,.....	31.48		
Care of Clock,.....	363.50		
		$1,603.90	
Maintenance and Repairs.			
Furniture and Fixtures,.....	$57.24		
Electrical Equipment,.....	349.01		
Building and Grounds,.....	3,862.57		
		4,268.82	
			5,872.72
Public Sanitary.			
Operation.			
Salaries and Wages, Janitors and Attendants,.....	$6,156.33		
Janitors' Supplies,.....	1,214.79		
Laundry Service,.....	662.84		
		$8,033.96	
Maintenance and Repairs.			
Electrical Equipment,.....	$58.66		
Heating, Plumbing, and Ventilating,.....	271.35		
Building and Grounds,.....	300.11		
		630.12	
			8,664.08
Forward,.....			$458,178.17

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Forward,.....		$458,178.17
PUBLIC BUILDINGS, DEPARTMENT OF (Cont.).		
Municipal Heating Plant.		
Operation.		
Salaries, Chief Engineer and Assistant,...	$4,156.00	
Salaries and Wages, Firemen,.....	7,159.98	
Communication Service.		
Telephone,.....	.20	
Transportation Service.		
Freight, Express, and Cartage,.....	14.88	
Ice,.....	8.80	
Electric Light,.....	176.16	
Laundry Service,.....	60.00	
Coal,.....	7,808.08	
Oils and Lubricants,.....	73.63	
Miscellaneous Supplies and Expenses,....	1,548.86	
		20,506.59
		$478,684.76
Less Transfers,.....		4,507.50
		$474,177.26
Municipal Organ Concerts.		
Organists' Services,.....	$1,060.00	
Soloists' Services,.....	195.00	
Miscellaneous Supplies and Expenses,.....	175.09	
		1,430.09
Total, Department of Public Buildings,.....		$475,607.35
PUBLIC LIBRARY (Schedule 27).		
Contribution to Library,.....		$137,737.00
PUBLIC PARKS, DEPARTMENT OF (Schedule 28).		
General Administration.		
Salary, Superintendent,.....	$3,933.31	
Salaries and Wages, Permanent Employees,...	25,646.16	
Salaries and Wages, Temporary Employees,..	1,601.67	
Stationery and Office Supplies,.....	106.23	
Printing, Binding, etc.,.....	151.85	
Communication Service.		
Telephone,.....	212.00	
Heat, Light, and Power,.....	198.33	
Rents and Privileges,.....	2.00	
Taxes and Water Rents,.....	49.35	
Vacations and Other Lost Time,.....	3,072.88	
Miscellaneous Supplies and Expenses,.....	818.90	
		$36,792.68

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Forward,.....			$35,792.68
PUBLIC PARKS, DEPARTMENT OF (Cont.).			
Operation.			
Automobile Service.			
Salaries, Chauffeurs,.....	$4,742.80		
Operating Supplies,.....	4,658.43		
Repairs and Replacements,.....	7,312.58		
Other Expense,.....	374.10		
		$17,087.91	
Teaming and Stables.			
Wages, Stablemen and Drivers,.....	$6,115.20		
Forage,.....	3,363.51		
Other Expenses,.....	1,141.19		
		10,619.90	
Drinking Fountains.			
Wages, Laborers,.....	$216.80		
Ice,.....	265.20		
Other Expenses,.....	141.49		
		623.49	
Zoological Garden, Forest Park.			
Wages,.....	$7,831.20		
Forage,.....	3,965.85		
Other Supplies and Expenses,.....	1,046.61		
		12,843.66	
Operating, Care and Maintenance of Parks.			
Forest Park.			
Building and Structures,.....	$9,424.42		
Roadways and Drives,.....	33,015.00		
Lawns, Gardens, and Flowers,.....	6,235.60		
Tennis Courts, Ball and Play Grounds,...	2,403.67		
Other Expenses,.....	10,877.09		
		61,955.78	
Van Horn Park.			
Buildings and Structures,.....	$7,095.39		
Roadways and Drives,.....	3,813.16		
Other Expenses,.....	24.70		
		10,933.25	
All Other Small Parks.			
Roadways and Drives,.....	$172.80		
Lawns, Gardens, and Flowers,.....	9,730.27		
Other Expenses,.....	211.49		
		10,114.56	
Botanical Division.			
Wages,.....	$8,317.32		
Supplies,.....	819.40		
Other Expenses,.....	510.85		
		9,647.57	
Forward,.....		$133,826.12	$35,792.68

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Forward,		$133,826.12	$35,792.68
Public Parks, Department of (Cont.).			
Operation (Cont.).			
Forestry.			
Salaries and Wages,	$29,313.99		
Supplies,	796.07		
Materials,	1,716.45		
Equipment and Tools,	797.97		
Insect Pest Extermination.			
Insecticides,	714.03		
Moth Inspection and Spraying Labor,	2,735.75		
		36,074.26	
			169,900.38
Maintenance and Repairs.			
Equipment.			
Stable,	$401.29		
Construction,	176.82		
Horticultural,	66.42		
Small Tools,	17.57		
Other Items,	299.49		
		$961.59	
Replacements.			
Equipment.			
Stable,	$1,644.95		
Construction,	90.00		
Horticultural,	146.75		
Small Tools,	547.18		
Other Items,	1,836.31		
		4,265.19	
Shop and Mill.			
Paint Shop.			
Labor,	$3,023.92		
Material,	1,222.11		
Carpenter Shop.			
Labor,	2,449.40		
Material,	164.88		
Blacksmith Shop.			
Labor,	2,101.20		
Material,	229.28		
Mill.			
Labor,	5,634.63		
Material,	410.58		
		15,236.00	
			20,462.78
Recreation and Entertainment.			$226,155.84
Administration.			
Salary, Director,	$400.28		
Salaries and Wages, Clerk,	300.00		
Printing, Binding, etc.,	4.92		
Communication Service,	97.16		
Rents and Privileges,	202.00		
			1,004.36
Forward,			$227,160.20

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Forward,.....			$227,166.20
PUBLIC PARKS, DEPARTMENT OF (Cont.).			
Recreation and Entertainment (Cont.).			
Operation.			
Playgrounds.			
Salaries, Directors and Assistants,.....	$4,463.11		
Salaries, Caretakers and Janitors,.....	5,182.20		
Recreational Supplies,.....	943.54		
Other Expenses,.....	2,530.37		
		$13,119.22	
Social Centers.			
Salaries, Assistants and Musicians,.....	$2,269.50		
Salaries, Janitors,.....	935.11		
Recreational Supplies,.....	101.87		
Cleaning, Toilet Supplies,.....	14.03		
Other Expenses,.....	22.85		
		3,343.36	
Swimming Pools.			
Salaries and Wages,.....	$2,478.63		
Supplies,.....	564.50		
Other Expenses,.....	723.80		
		3,766.93	
Celebrations and Entertainments.			
Band Concerts,.....	$1,381.40		
Independence Day,.....	202.40		
		1,583.80	
			21,813.31
Maintenance and Repairs.			
Equipment, Office,.....	$189.80		
Equipment, Playground,.....	729.16		
			918.96
Replacements.			
Equipment, Playgrounds,.....			53.84
			$249,946.31
Less Transfers and Refunds,.....			13,918.81
Total, Department of Public Parks, ...			$236,027.50
PUBLIC WORKS, BOARD OF (Schedule 29).			
Administration.			
Salaries and Wages, Board Members,.....		$612.00	
Salary of Clerk,.....		1,144.00	
Stationery and Office Supplies,.....		161.78	
Printing, Binding, etc.,.....		18.01	
Transportation Service,.....		136.26	
Advertising,.....		28.80	
Miscellaneous Supplies and Expenses,.....		11.35	
			$2,112.20

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Refunds (Schedule 30).			
Auditorium Rentals,		$319.00	
Licenses,		26.60	
Health Department Hospital,		177.14	
Miscellaneous Sales, Department of Streets and Engineering,		40.76	
Sewer Entrance Fees,		2,000.46	
Taxes—Corporation,		462.40	
Taxes—Real Estate,		177.75	
Tuition, Schools,		769.41	
		$3,973.52	
Less Transfers and Refunds,		10.08	
			$3,963.44
Revenues Receivable, Abatement of (Schedule 31).			
Reserve for Abated Bills,			$39,698.36
School Department (Schedule 32).			
ADMINISTRATION.			
Salaries.			
Superintendent,	$5,800.00		
Assistant Superintendent,	1,300.00		
Secretary of the School Committee,	100.00		
Chief Clerk,	2,800.00		
Clerks,	10,037.04		
Attendance Officers,	9,433.33		
		$29,470.37	
Stationery and Office Supplies,		651.28	
Printing,		1,445.15	
Communication Service.			
Postage,	$662.15		
Telephone,	212.58		
Telegraph,	48.91		
		923.64	
Transportation Service.			
Freight and Express,		5.10	
Miscellaneous Supplies and Expenses, Not elsewhere Provided For.			
Automobile Upkeep,	$250.00		
Magazine Subscriptions,	120.75		
Miscellaneous,	16.10		
		386.85	
Traveling Expenses,		520.76	
Maintenance and Repairs of Equipment,		115.10	
Replacement of Equipment,		265.29	
Forward,		$33,783.54	

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Forward,.....		$33,783.54	
SCHOOL DEPARTMENT (Cont.).			
Administration (Cont.).			
Storehouse.			
Salaries,.....	$2,600.00		
Expenses.			
Telephone,..... $53.99			
Delivery Supplies,..... 3,776.71			
Miscellaneous,..... 10.30			
	3,841.00		
		6,441.00	
			$40,224.54
CENTRAL HIGH SCHOOL.			
Administration.			
Salary, Principal,.....		$4,700.00	
Salaries, Clerical Assistance,.....		1,470.00	
Office Supplies,.....		135.85	
Printing,.....		586.44	
Communication Service.			
Postage,.....	$32.00		
Telephone,.....	24.32		
		56.32	
Transportation Service.			
Freight and Express,.....	$76.33		
Traveling Expenses,.....	76.76		
		153.09	
Operation.			
Salaries.			
Heads of Departments,.....	$23,062.50		
Teachers,.....	88,170.91		
		111,233.41	
Salary, Matron,.....		1,193.25	
Salaries, Miscellaneous Assistance.			
Piano Accompanist,.....	$300.00		
Laboratory,.....	248.10		
Physical Education,.....	431.60		
Drawing,.....	43.77		
Office,.....	70.23		
Miscellaneous,.....	18.45		
		1,112.15	
Books.			
Text,.....	$2,378.43		
Reference,.....	199.23		
Magazine Subscriptions,.....	29.90		
Binding,.....	221.10		
Covers,.....	190.50		
		3,019.16	
Forward,.....		$123,659.67	$40,224.54

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Forward,.....		$123,659.67	$40,224.54
SCHOOL DEPARTMENT (Cont.).			
Central High School (CONT.).			
Stationery Supplies.			
Paper.			
White,.....	$4.30		
Manila,.....	87.00		
Drawing,.....	51.90		
Notebooks,.....	270.36		
Blotting,.....	18.32		
Pressboard and Cardboard,.....	161.15		
Miscellaneous,.....	66.60		
		659.63	
Ink,.....	$20.65		
Paste, etc.,.....	5.12		
Pencils,.....	103.81		
Pens and Holders,.....	36.00		
Thumb Tacks and Paper Fasteners,.....	30.82		
Rubber Erasers,.....	32.56		
Rubber Bands,.....	6.45		
		235.41	
Supplies and Materials Used in Special Courses.			
Science.			
Glassware and Other Small Laboratory Articles,.....	$156.78		
Chemicals,.....	298.25		
Miscellaneous,.....	523.91		
	$978.94		
Domestic Science.			
Provisions,.....	$50.78		
Sewing Supplies,.....	73.23		
	124.01		
Physical Education.			
Rent of Field,.....	$75.00		
Miscellaneous,.....	279.63		
	354.63		
Drawing.			
Paints,.....	$52.93		
Paint Pans and Brushes,.....	67.96		
Drawing Crayons,.....	26.40		
Miscellaneous,.....	68.07		
	215.36		
		1,672.94	
Other Operating Supplies.			
Outline Maps,.....	$49.33		
Compasses,.....	51.31		
Rules,.....	3.90		
Maps, Charts, and Globes,.....	73.78		
Blackboard Erasers,.....	10.83		
Sponges,.....	8.00		
Paper Towels,.....	612.60		
Pencil Sharpeners,.....	4.50		
Linen Towels,.....	9.00		
Miscellaneous,.....	73.87		
		897.07	
Forward,.....		$127,124.72	$40,224.54

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Forward,.....		$127,124.72	$40,224 54
SCHOOL DEPARTMENT (Cont.).			
Central High School (Cont.).			
Other Operating Expenses.			
Graduation Expenses,.....	$220.81		
Miscellaneous,.....	49.35		
		270.16	
Maintenance and Repair of Equipment.			
Science,.....	$1.45		
Miscellaneous,.....	26.43		
		27.88	
Replacement of Equipment.			
Science,.....		210.17	
		$127,632.93	
Less Transfers and Refunds,.....		200.00	
			127,432.93
TECHNICAL HIGH SCHOOL.			
Administration.			
Salary, Principal,.....		$4,500.00	
Salaries, Clerical Assistance,.....		2,599.94	
Office Supplies,.....		130.73	
Printing,.....		883.44	
Communication Service.			
Postage,.....	$58.00		
Telephone,.....	53.40		
		111.40	
Transportation Service.			
Freight and Express,.....		172.61	
Traveling Expenses,.....		71.41	
Operation.			
Salaries.			
Heads of Departments,.....	$22,167.50		
Teachers,.....	103,365.12		
		125,532.62	
Salaries, Miscellaneous Assistance.			
Tool Room,.....	$426.42		
Science,.....	46.92		
Physical Education,.....	68.20		
English Books,.....	133.27		
Piano Accompanist,.....	100.00		
Miscellaneous,.....	48.00		
		822.81	
Books.			
Text,.....	$3,370.58		
Reference,.....	209.47		
Magazine Subscriptions,.....	10.00		
Binding,.....	105.00		
Covers,.....	110.00		
		3,805.05	
Forward,.....		$138,630.01	$167,657.47

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Forward,.....			$138,680.01	$167,657.47
SCHOOL DEPARTMENT (Cont.).				
Technical High School (Cont.).				
Stationery Supplies.				
Paper.				
White,.....	$420.00			
Manila,.....	136.25			
Notebooks,.....	487.50			
Envelopes,.....	6.50			
Blotting,.....	8.80			
Pressboard and Cardboard,...	16.90			
Miscellaneous,.....	40.50			
		$1,116.45		
Ink,.....		15.60		
Pencils,.....		12.50		
Pens and Holders,.....		60.96		
Thumb Tacks and Paper Fasteners,.....		25.50		
Rubber Erasers,.....		6.36		
Rubber Bands,.....		7.74		
			1,245.11	
Supplies Used in Special Courses.				
Chemistry and Physics.				
Glassware and Other Small Laboratory Articles,.....	$30.49			
Chemicals,.....	524.27			
Miscellaneous,.....	262.98			
		$817.74		
Drawing.				
Small Drawing Tools,.....	$84.71			
Paper, Pencils, and Ink,.....	626.96			
Miscellaneous,.....	17.65			
		729.32		
Machine Shop.				
Small Tools,.....	$91.68			
Castings, Metals, etc.,.....	656.63			
Miscellaneous,.....	41.70			
		790.01		
Wood Work.				
Lumber,.....	$755.96			
Small Tools,.....	77.56			
Miscellaneous,.....	187.76			
		1,021.28		
Household Science,.....		412.10		
Household Arts,.....		92.66		
Design.				
Small Tools,.....	$29.41			
Miscellaneous,.....	266.38			
		295.79		
Forging.				
Coal,.....	$158.00			
Metals,.....	346.32			
		504.32		
Forward,.....		$4,663,22	$139,875.12	$167,657.47

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Forward,		$4,668.22	$189,875.12	$167,657.47
SCHOOL DEPARTMENT (Cont.).				
Technical High School (Cont.).				
Physical Education.				
Rent of Field,	$75.00			
Miscellaneous,	183.59			
		258.59		
			4,921.81	
Other Operating Supplies.				
Paper Towels,		$393.81		
Miscellaneous,		124.06		
			517.87	
Other Operating Expenses.				
Graduation Expenses,		$202.21		
Miscellaneous,		97.01		
			299.22	
Maintenance and Repair of Equipment.				
Chemistry and Physics,		$2.79		
Drawing,		5.80		
Machine Shop,		82.45		
Wood Work,		72.30		
Household Arts,		15.25		
Design,		12.75		
Forging,		4.05		
Miscellaneous,		232.98		
			428.37	
Replacement of Equipment.				
Chemistry and Physics,		$228.96		
Drawing,		117.18		
Wood Work,		7.10		
Machine Shop,		266.03		
Household Science,		17.50		
Design,		230.40		
Forging,		95.80		
Miscellaneous,		30.00		
			992.97	
			$147,035.36	
Less Transfers and Refunds,			280.30	
				146,755.06
EVENING SCHOOL OF TRADES.				
Administration.				
Salary, Principal,			$720.00	
Salaries, Clerical Assistance,			319.50	
Printing,			44.41	
Operation.				
Salaries, Teachers,			8,337.70	
Salaries, Miscellaneous Assistance,			170.75	
Forward,			$9,592.36	$314,412.53

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Forward,.....		$9,592.36	$314,412.53
SCHOOL DEPARTMENT (Cont.).			
Evening School of Trades (Cont.).			
Supplies Used in Special Courses.			
Machine Shop,.....	$123.86		
Electricity,.....	171.68		
Plumbing,.....	152.21		
Wood Work,.....	42.33		
Sewing,.....	43.04		
Cookery,.....	87.45		
Design,.....	80.82		
		701.39	
Other Operating Expenses,.....		184.60	
Repair and Maintenance of Equipment,.....		2.99	
			10,481.34
HIGH SCHOOL OF COMMERCE.			
Administration.			
Salary, Principal,.....		$4,500.00	
Salaries, Clerical Assistance,.....		2,600.00	
Stationery and Office Supplies,.....		23.41	
Printing,.....		688.49	
Communication Service.			
Postage,.....	$29.00		
Telephone,.....	19.49		
		48.49	
Transportation Service.			
Freight and Express,.....		156.35	
Traveling Expenses,.....		35.17	
Operation.			
Salaries.			
Heads of Departments,.....	$16,822.50		
Teachers,.....	102,425.94		
		119,248.44	
Salary, Matron,.....		1,200.00	
Salaries, Miscellaneous Assistance.			
Piano Accompanist,.....	$100.00		
Moving Pictures,.....	395.85		
Physical Education,.....	249.12		
Miscellaneous,.....	40.97		
		785.94	
Books.			
Text,.....	$1,933.65		
Reference,.....	576.22		
Binding,.....	102.80		
Covers,.....	92.00		
Magazine Subscriptions,.....	64.56		
Mending Materials,.....	3.33		
		2,772.56	
Forward,.....		$132,058.85	$324,893.87

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Forward,.....			$182,058.85	$324,893.87
SCHOOL DEPARTMENT (Cont.).				
High School of Commerce (Cont.).				
Stationery Supplies.				
Paper.				
White.....	$341.40			
Manila,.....	61.00			
Drawing,.....	48.14			
Bookkeeping,.....	1,824.01			
Notebooks,.....	67.21			
Blotting,.....	28.50			
Pressboard and Cardboard,...	1.00			
Typewriting,.....	324.40			
Miscellaneous,.....	91.52			
		$2,787.18		
Ink,.....	$91.20			
Paste, etc.,.....	2.48			
Pencils,.....	168.50			
Pens and Holders,.....	134.00			
Thumb Tacks and Paper Fasteners,.....	56.42			
Rubber Erasers,.....	23.27			
Rubber Bands,.....	6.67			
Typewriter Ribbons,.....	152.86			
Miscellaneous,.....	124.53			
		759.93		
			3,547.11	
Supplies Used in Special Courses.				
Laboratory.				
Chemicals,.....	$4.50			
Miscellaneous,.....	153.33			
		$157.83		
Shop.				
Lumber,.....	$161.67			
Small Tools and Hardware,...	25.71			
Miscellaneous,.....	66.18			
		253.56		
Cookery.				
Provisions,.....		786.42		
Sewing,.....		106.44		
Physical Education.				
Rent of Field,.....	$75.00			
Laundry,.....	1,299.14			
Miscellaneous,.....	99.55			
		1,473.69		
Drawing,.....		299.16		
			3,077.10	
Other Operating Supplies.				
Paper Towels,.....		$536.53		
Outline Maps,.....		65.29		
Maps and Charts,.....		131.41		
First Aid Supplies,.....		40.43		
Miscellaneous,.....		176.19		
			949.85	
Forward,.....			$139,682.91	$324,893.87

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Forward,.....			$139,632.91	$324,893.87
SCHOOL DEPARTMENT (Cont.).				
High School of Commerce (Cont.).				
Other Operating Expenses.				
Moving Pictures.				
Films,.....	$549.83			
Miscellaneous,.....	59.26			
		$609.09		
Graduation Expenses,.....		226.76		
			835.85	
Maintenance and Repair of Equipment.				
Shop,.....		$6.00		
Cookery,.....		.45		
Sewing,.....		48.00		
Physical Education,.....		9.16		
Miscellaneous,.....		95.73		
			159.34	
Replacement of Equipment.				
Shop,.....		$38.45		
Physical Education,.....		165.04		
Miscellaneous,.....		279.83		
			483.32	
				$141,111.42
EVENING HIGH SCHOOL.				
Administration.				
Salary, Principal,.....			$568.00	
Salaries, Clerical Assistance,.....			285.00	
Stationery and Office Supplies,.....			20.76	
Printing,.....			109.25	
Communication Service.				
Postage,.....			11.00	
Transportation Service.				
Freight and Express,.....			7.25	
Operation.				
Salaries, Teachers,.....			8,531.50	
Books,.....			274.98	
Stationery Supplies.				
Paper.				
White,.....	$21.70			
Typewriting,.....	102.40			
Bookkeeping,.....	198.00			
Manila,.....	5.73			
Drawing,.....	10.00			
Notebooks,.....	40.38			
Envelopes,.....	1.36			
Blotting,.....	3.17			
Pressboard and Cardboard,...	26.07			
Miscellaneous,.....	11.15			
		$419.96		
Forward,.....		$419,96	$9,807.74	$466,005.29

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Forward,.....	$419.96	$9,807.74	$466,005.29
SCHOOL DEPARTMENT (Cont.).			
Evening High School (Cont.).			
Pencils,.....	62.90		
Pens and Holders,.....	51.28		
Thumb Tacks and Paper Fasteners,.....	1.59		
Rubber Erasers,.....	3.65		
Miscellaneous,.....	93.25		
		632.63	
Supplies and Materials Used in Special Courses,	$33.73		
Other Operating Supplies,.....	66.76		
		100.49	
Other Operating Expenses.			
Graduation,.....	$40.75		
Models,.....	24.25		
Miscellaneous,.....	24.60		
		89.60	
			$10,630.46
VOCATIONAL SCHOOL.			
Administration.			
Salary, Principal,.....		$2,614.34	
Salaries, Clerical Assistance,.....		1,080.28	
Stationery and Office Supplies,.....		29.57	
Communication Service.			
Postage,.....	$37.25		
Telephone,.....	14.22		
		51.47	
Transportation Service.			
Freight and Express,.....		121.74	
Traveling Expenses,.....		74.87	
Operation.			
Salaries, Teachers,.....		28,484.06	
Salaries, Miscellaneous Assistance,.....		47.00	
Books,.....		30.33	
Stationery and Supplies.			
Paper,.....	$81.48		
Ink,.....	1.53		
Pencils,.....	53.50		
Thumb Tacks and Paper Fasteners,.....	11.25		
Paste,.....	1.28		
Pens and Holders,.....	2.08		
Rubber Erasers,.....	2.99		
Rubber Bands,.....	.86		
		154.97	
Materials and Supplies Used in Special Courses.			
Printing.			
Paper,..... $311.97			
Ink,..... 33.81			
Miscellaneous,..... 34.96			
	$380.74		
Forward,.....	$380.74	$32,688.63	$476,635.75

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Forward,.....		$380.74	$32,688.63	$476,635.75
SCHOOL DEPARTMENT (Cont.).				
Vocational School (Cont.).				
Carpentry.				
Lumber,.....	$460.09			
Hardware,.....	62.48			
Miscellaneous,.....	79.41			
		601.98		
Cabinet.				
Lumber,.....	$505.11			
Hardware,.....	63.13			
Miscellaneous,.....	80.78			
		649.02		
Pattern.				
Lumber,.....	$202.49			
Hardware,.....	7.60			
Miscellaneous,.....	75.76			
		285.85		
Machine Shop.				
Small Tools,.....	$44.68			
Metals and Castings,.....	697.81			
Miscellaneous,.....	294.02			
		1,036.46		
Drawing,.....		140.56		
Electricity,.....		145.70		
			3,240.31	
Other Operating Supplies.				
Paper Towels,.....		$352.47		
First Aid Supplies,.....		17.98		
Miscellaneous,.....		89.87		
			460.32	
Other Operating Expenses.				
Graduation Expenses,.....		$5.20		
Pupils' Car Tickets,.....		245.00		
Miscellaneous,.....		5.67		
			255.87	
Maintenance and Repairs of Equipment.				
Printing,.....		$5.25		
Carpentry,.....		6.15		
Cabinet,.....		6.16		
Pattern,.....		10.92		
Machine Shop,.....		138.11		
Miscellaneous,.....		18.50		
			185.09	
Replacement of Equipment.				
Printing,.....		$102.77		
Carpentry,.....		47.00		
Cabinet,.....		47.19		
Pattern,.....		36.56		
Machine Shop,.....		760.30		
Miscellaneous,.....		171.60		
			1,165.42	
			$37,995.64	
Less Transfers and Refunds,.....			615.30	
				37,380.34
Forward,.....				$514,016.09

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Forward,.....			$514,016.09
SCHOOL DEPARTMENT (Cont.).			
VOCATIONAL SUMMER SCHOOL.			
Administration.			
Salary, Principal,.....		$210.00	
Salaries, Teachers,.....		2,493.75	
Operation.			
Supplies,.....		511.40	
Other Operating Expenses,.....		20.13	
			$3,235.28
EVENING VOCATIONAL SCHOOL.			
Salary, Principal,.....		$189.00	
Salaries.			
Clerk,.....	$90.00		
Teachers,.....	957.54		
		1,047.54	
Supplies,.....		257.19	
Tuition,.....		46.88	
Other Operating Expenses,.....		20.30	
			$1,560.91
VOCATIONAL—HOOKER.			
Supplies Used in Special Courses,.....			$203.30
CONTINUATION SCHOOLS.			
Administration.			
Salary, Principal,.....		$3,000.00	
Salaries, Clerical Assistance,.....		965.06	
Stationery and Office Supplies,.....		114.11	
Communication Service.			
Postage,.....	$43.50		
Telephone,.....	195.08		
		238.58	
Transportation Service.			
Freight and Express,.....		273.21	
Traveling Expenses,.....		42.29	
Operation.			
Salaries, Teachers,.....		25,384.75	
Books.			
Text,.....	$124.78		
Reference,.....	76.74		
		201.52	
Stationery Supplies.			
Paper,.....	$63.49		
Ink,.....	.90		
Paste,.....	.57		
Pencils,.....	54.03		
Thumb Tacks and Paper Fasteners,.....	20.02		
Rubber Erasers,.....	1.59		
Rubber Bands,.....	1.29		
		141.89	
Forward,.....		$30,361.41	$519,015.58

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Forward,		$30,361.41	$519,015.58
SCHOOL DEPARTMENT (Cont.).			
Continuation School (Cont.).			
Materials and Supplies Used in Special Courses.			
Boys' Division,	$1,570.04		
Girls' Division,	329.96		
		1,900.00	
Other Operating Supplies,		115.49	
Other Operating Expenses.			
Car Tickets, Teachers,	$157.50		
Car Tickets, Pupils,	420.00		
Miscellaneous,	1.05		
Installing Machinery,	306.50		
		885.05	
Maintenance and Repair of Equipment,		8.82	
Replacement of Equipment,		173.33	
		$33,444.10	
Less Transfers and Refunds,		2.50	
			$33,441.60
GRADED SCHOOLS AND JUNIOR HIGH.			
Administration.			
Salaries, Supervisors,	$38,049.40		
Supervising Principals,	72,654.79		
		$110,704.19	
Stationery and Office Supplies,		255.4	
Printing,		2,134.74	
Communication Service.			
Postage,	$30.00		
Telephone,	1,334.84		
		1,364.84	
Transportation Service.			
Freight and Express,		712.64	
Traveling Expenses,		335.10	
Miscellaneous Expenses,		234.13	
Operation.			
Salaries, Teachers,		940,674.49	
Salaries, Matrons,		8,922.10	
Salaries, Miscellaneous.			
Industrial Work,	$ 18.32		
Art and Hand Work,	587.48		
Care of Lunch Room,	351.00		
Miscellaneous,	16.50		
		973.30	
Transportation of Pupils.			
Salaries,	$1,325.00		
Car Tickets,	4,086.25		
		5,411.25	
Forward,		$1,071,722.22	$552,457.18

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Forward,.....			$1,071,722.22	$552,457.18
SCHOOL DEPARTMENT (Cont.).				
Graded Schools and Junior High (Cont.).				
Support of Truants,.....			2,432.00	
Books.				
Text,.....		$22,810.66		
Reference,.....		672.88		
Binding,.....		784.30		
Mending Materials,.....		511.20		
Covers,.....		2,363.00		
Writing Copies,.....		118.80		
Music,.....		91.57		
			26,852.41	
Stationery Supplies.				
Paper.				
White,.....	$5,087.38			
Manila,.....	2,498.82			
Drawing,.....	919.78			
Bookkeeping,.....	877.52			
Notebooks,.....	1,355.84			
Envelopes,.....	501.41			
Blotting,.....	234.90			
Pressboard and Cardboard,...	1,715.78			
Labels,.....	126.56			
Cards,.....	92.90			
Miscellaneous,.....	212.95			
		$13,623.84		
Ink,.....		390.10		
Paste, etc.,.....		723.82		
Pencils,.....		2,596.75		
Pens and Holders,.....		1,400.00		
Thumb Tacks and Paper Fasteners,.....		590.63		
Rubber Erasers,.....		287.39		
Rubber Bands,.....		200.72		
			19,813.25	
Materials and Supplies Used in Special Courses.				
Physical Education.				
Baseball,.....	$464.61			
Field Day,.....	104.42			
Phonograph Records and Music,.....	161.75			
Balls,.....	503.61			
Rent of Field,.....	125.00			
Miscellaneous,.....	615.91			
		$1,975.30		
Industrial Work.				
Lumber,.....	$4,079.32			
Metals,.....	329.43			
Cement, Sand, etc.,.....	145.34			
Paints, etc.,.....	381.14			
Hardware,.....	540.51			
Printing Supplies,.....	198.04			
Mechanical Drawing,.....	420.07			
Miscellaneous,.....	121.60			
		6,215.45		
Forward,.....		$8,190.75	$1,120,819.88	$552,457.18

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Forward,.....		$8,190.75	$1,120,819.88	$552,457.18
SCHOOL DEPARTMENT (Cont.).				
Graded Schools and Junior High (Cont.).				
Art and Hand Work.				
Paint,.....	$710.60			
Paint Pans and Brushes,.....	95.58			
Drawing Crayons,.....	965.16			
Miscellaneous Art Supplies,...	848.10			
Lumber,.....	299.75			
Hardware,.....	46.90			
Paints,.....	51.10			
Miscellaneous Hand Work and Supplies,.....	893.72			
		3,910.91		
Household Science and Practical Arts.				
Provisions,.....	$2,719.78			
Ice,.....	49.41			
Laundry,.....	61.60			
Serving Supplies,.....	865.83			
		3,696.62		
Psychological Laboratory,.....		7.39		
Science.				
Junior High Science Supplies,.	$48.85			
Gardens,.....	334.61			
Elementary Science Supplies,.	147.62			
		531.08		
Supplies Used in Open-Air Rooms.				
Provisions,.....	$3,668.69			
Laundry,.....	134.43			
Miscellaneous,.....	107.42			
		3,910.54		
Other Miscellaneous Supplies.				
Kindergarten Materials,.....	$632.10			
Outline Maps,.....	161.16			
Compasses,.....	245.00			
Rules,.....	282.90			
Maps, Charts, and Globes,.....	489.36			
Blackboard Erasers,.....	82.50			
Sponges,.....	475.30			
Chalk,.....	337.75			
Pencil Sharpeners,.....	157.70			
Scissors,.....	1,294.62			
Mats,.....	233.16			
Burlap,.....	62.59			
Hygiene Supplies,.....	254.76			
Paper Towels,.....	1,388.75			
Linen Towels,.....	400.00			
Word and Number Builders,....	306.21			
Hecktographs,.....	78.25			
First-Aid Supplies,.....	32.47			
Miscellaneous,.....	1,208.25			
		8,122.83		
Other Operating Expenses,.....		542.53		
			28,912.65	
Forward,.....			$1,149,732.53	$552,457.18

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Forward,.....		$1,149,732.53	$552,457.18
SCHOOL DEPARTMENT (Cont.).			
Graded Schools and Junior High (Cont.).			
Maintenance and Repairs of Equipment.			
Physical Education,.....	$163.34		
Industrial Work,.....	136.27		
Art and Hand Work,.....	22.67		
Household Science,.....	41.30		
Miscellaneous,.....	114.19		
		477.77	
Replacement of Equipment.			
Physical Education,.....	$13.50		
Industrial Work,.....	922.59		
Art and Hand Work,.....	28.80		
Household Science,.....	343.91		
Science,.....	31.00		
Miscellaneous,.....	257.86		
		1,597.66	
		$1,151,807.96	
Less Transfers and Refunds,.....		3,465.03	
			$1,148,342.93
KINDERGARTENS.			
Salaries, Teachers,.....		$74,645.23	
Supplies,.....		1,313.09	
Other Operating Expenses.			
Christmas Allowance,.....	$51.00		
Tuning Pianos,.....	11.50		
Miscellaneous,.....	68.55		
		131.05	
Replacement of Equipment,.....		1,000.06	
			$77,089.43
ELEMENTARY EVENING SCHOOLS AND EVENING SCHOOL EXTENSION.			
Administration.			
Salaries, Principals,.....		$4,280.00	
Office Supplies,.....		7.61	
Printing,.....		147.32	
Freight and Express,.....		27.71	
Operation.			
Salaries, Teachers,.....		14,538.01	
Books,.....		605.96	
Stationery Supplies.			
Paper,.....	$90.17		
Paste,.....	3.51		
Pencils,.....	33.60		
Pens and Holders,.....	1.04		
Thumb Tacks and Paper Fasteners,.....	1.34		
Rubber Erasers,.....	4.11		
Rubber Bands,.....	.34		
		134.11	
Forward,.....		$19,740.72	$1,777,889.54

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Forward,.....		$19,740.72	$1,777,889.54
SCHOOL DEPARTMENT (Cont.).			
Elementary Evening Schools and Evening School Extension (Cont.).			
Supplies Used in Special Courses,.....		10.60	
Other Operating Supplies,.....		133.30	
Other Operating Expenses.			
Films,.....	$326.31		
Typewriter Rental,.....	163.50		
Miscellaneous,.....	95.86		
		585.67	
			$20,470.29
GRADED SCHOOLS LUNCH.			
Salaries,.....		$576.00	
Supplies.			
Provisions,.....	$982.58		
Miscellaneous,.....	10.15		
		992.73	
Miscellaneous Expenses,.....		13.39	
Replacement of Equipment,.....		2.29	
			$1,584.41
HIGH SCHOOLS LUNCH.			
Salaries.			
Director,.....	$2,000.00		
Assistant Director,.....	1,200.00		
Other Assistance,.....	11,320.61		
		$14,520.61	
Supplies.			
Provisions,.....	$38,201.71		
Ice,.....	172.61		
Napkins,.....	58.91		
Cleaning Supplies,.....	247.84		
Miscellaneous Supplies,.....	294.76		
		38,975.83	
Other Expenses.			
Car Fares,.....	$69.30		
Postage,.....	8.50		
Laundry,.....	315.51		
Telephone,.....	1.15		
Freight and Express,.....	83.27		
Miscellaneous,.....	85.89		
		558.62	
Maintenance and Repairs of Equipment,.....		133.30	
Replacement of Equipment,.....		530.61	
		$54,718.97	
Less Transfers and Refunds,.....		533.98	
			54,184.99
Total, School Department,.....			$1,854,129.23

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Smoke Inspector (Schedule 33).			
Operation.			
Salary of Smoke Inspector,.....		$300.00	
Miscellaneous Supplies and Expenses,.....		118.89	
			$418.89
Soldiers' Relief Commissioner (Schedule 34).			
Administration.			
Salary of Secretary,.....	$2,066.68		
Salary of Permanent Employees,.....	978.64		
Stationery and Office Supplies,.....	34.14		
Printing, Binding, etc.,.....	37.56		
Communication Service.			
Postage,.....	34.25		
Telephone,.....	1.45		
Transportation Service.			
Carfares,.....	16.10		
Fees to Burial Agent,.....	12.00		
Miscellaneous Supplies and Expenses,.....	7.50		
		$3,188.32	
State Aid.			
Contributions to Civil War Veterans,.....	$8,182.00		
Contributions to Spanish War Veterans,.....	248.00		
Contributions to German War Veterans,.....	276.00		
Contributions to Military Aid, German War,.	3,062.00		
Contributions to Military Aid, Spanish War,..	1,350.00		
		13,118.00	
Soldiers' Relief.			
Allowances to Beneficiaries,.....	$23,644.98		
Undertakers' Fees,.....	337.50		
		23,982.48	
		$40,288.80	
Less Credits,.....		160.00	
			$40,128.80
Soldiers' and Sailors' Graves, Care of (Schedule 35).			
Administration.			
Salary of Supervisor,.....		$200.00	
Care of Graves,.....		676.00	
			$876.00
Streets and Engineering, Department of (Schedule 36).			
Completed Work.			
Collection of Ashes,.....		$151,214.53	
Collection and Disposal of Rubbish,.....		46,655.23	
Collection and Disposal of Garbage,.....		68,735.18	
Bridge Construction,.....		27,412.85	
Bridge Maintenance.			
City's Proportion,.....	$26,609.22		
Assessable,.....	149.63		
		26,758.85	
Forward,.....		$320,776.59	

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Forward,.....		$320,776.59	
STREETS AND ENGINEERING, DEPARTMENT OF (Cont.).			
Completed Work (Cont.).			
Highways—Construction,.....		278,059.09	
Highways—Maintenance.			
City's Proportion,.....	$253,826.46		
Assessable,.....	33,917.41		
		287,743.87	
Mayor's Automobile,.....		1,459.31	
Municipal Automobile,.....		598.90	
Work Done for City Departments and Others,..		11,180.79	
Repair Shop,.....		239.16	
Sewers—Construction.			
City's Proportion,.....		317,049.90	
Sewers—Maintenance.			
City's Proportion,.....	$21,313.93		
Assessable,.....	12,100.69		
		33,414.62	
Sidewalks and Curbing—Construction.			
City's Proportion,.....	$25,912.74		
Assessable,.....	35,184.03		
		61,096.77	
Sidewalks and Curbing—Maintenance.			
City's Proportion,.....	$15,863.91		
Assessable,.....	1,460.94		
		17,324.85	
Stables and Yards.			
Repairs and Alterations,.....		8,675.34	
Street Cleaning,.....		180,578.78	
Street Lighting, ...		150,259.58	
Street Oiling.			
City's Proportion,.....	$42,354.03		
Assessable,.....	511.25		
		42,865.28	
Street Sprinkling,.....		19,441.64	
Expense Not Chargeable to Departmental Cost		18,068.27	
Miscellaneous Expenditures.			
Small Tools,.....		16,680.70	
		$1,765,513.39	
Less Adjustments, Overhead Expense,.....	$45,933.52		
Less Use of Equipment,.....	4,776.03		
Less Materials from Sources Unaccounted for,..	183.23		
		50,892.78	
		$1,714,620.61	
Less Transfers and Refunds,.....		322,225.20	
Total, Department of Streets and Engineering,			$1,392,395.41
TAXES (Schedule 37).			
County Tax,.....		$207,216.10	
National Bank Tax,.....		46,121.54	
State Tax,.....		572,320.00	
Special State Tax,.....		26,980.80	
Civilian War Poll Tax,.....		102,657.00	
			$955,295.44

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TAX EXEMPTIONS, SOLDIERS AND SAILORS (Schedule 38).			
Payment to Commonwealth,			$1,059.93
WEIGHTS AND MEASURES, SEALER OF (Schedule 39).			
Administration.			
Salary of Sealer,	$2,433.35		
Salaries and Wages, Permanent Employees,	849.99		
Stationery and Office Supplies,	46.27		
Printing, Binding, etc.,	170.73		
Communication Service.			
Postage,	10.00		
Telephone and Telegraph,	2.10		
Transportation Service.			
Freight, Express, and Cartage,	117.72		
Carfares,	4.20		
Traveling Expenses,	94.60		
Miscellaneous Supplies and Expenses,	165.28		
		$3,894.19	
Operation.			
Salaries, Deputy Sealers,	$3,366.66		
Miscellaneous Supplies,	56.48		
		3,423.14	
Automobile Service.			
Operating Supplies,	$250.23		
Repairs and Replacements,	750.52		
Other Expenses,	143.50		
		1,144.25	
			$8,461.58
WIRES, INSPECTOR OF (Schedule 40).			
Salary, Inspector,		$500.00	
Advertising,		13.60	
Miscellaneous Supplies and Expenses.			
Office Supplies,	$5.35		
Tools,	73.56		
Base Bolts,	18.87		
Material Purchased but Not Used,	82.51		
		180.29	
Pension,		175.00	
Underground Work.			
1920 Prescribed District.			
Fiske Avenue.			
Cable,	$281.23		
Pipe,	77.56		
Box,	35.90		
		394.69	
Orange and Allen Streets.			
Cable,	$331.16		
Box,	35.90		
Pipe,	12.60		
		379.66	
Forward,		$1,643.24	

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Forward,		$1,643.24	
WIRES, INSPECTOR OF (Cont.).			
Underground Work (Cont.).			
1921 Prescribed District.			
Armory and Carew Streets.			
Cable,	$155.26		
Pipe,	14.15		
		169.41	
Carew and Newbury Streets.			
Pipe,	$132.59		
Labor,	26.54		
		159.13	
White Street, Sumner Avenue to Belmont Avenue.			
Cable,		470.30	
			$2,442.08
WORKMEN'S COMPENSATION (Schedule 41).			
Compensation,		$6,783.05	
Physicians' Services,		1,481.00	
Hospital Expenses,		327.34	
Medicine,		30.20	
Stationery and Office Supplies,		18.81	
Communication Service.			
Telephone,		60.02	
			$8,700.42
SPECIAL ACCOUNTS.			
BERKSHIRE AVENUE BRIDGE (Schedule 42).			
Services of Special Commissioner,			$303.11
CITY REALTY COMMITTEE (Schedule 43).			
Appraisals,		$75.00	
Signs,		186.08	
			$261.08
FOREST PARK EXTENSION (Schedule 44).			
Surveying,			$1,510.50
PORTER LAKE (Schedule 45).			
Labor and Material,			$339.23
PYNCHON STREET SCHOOLHOUSE REMOVAL (Schedule 46).			
Removal from Old to New Site,		$26,000.00	
Concrete Footings,		720.00	
			$26,720.00
SOUTH END BRIDGE REPAIRS (Schedule 47).			
Advertising,		$275.40	
Engineering Services,		127.89	
Removing Old Deck,		975.76	
			$1,379.05

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SPECIAL ACCOUNTS (Cont.).		
SPRINGFIELD—LUDLOW BRIDGE (Schedule 48).		
Engineer's Services,	$1,698.00	
Labor Charges,	5,169.76	
Transportation Service,	1,000.00	
Lumber,	4,110.88	
Freight on Lumber,	580.84	
Steel,	13,900.00	
		$26,459.48
SPRINGFIELD—WEST SPRINGFIELD BRIDGE (Schedule 49).		
Attorneys' Services,	$10,722.37	
Traveling Expenses,	472.59	
Hotel Expenses,	1,353.11	
Communication Service.		
Telephone,	26.47	
Expense of Conferences with Members of State Legislature and Others,	1,141.65	
Printing, Binding, etc.,	282.58	
		$13,998.77
TRANSPORTATION, COMMITTEE ON (Schedule 50).		
Salary of Supervisor,	$350.00	
Transportation Service.		
Carfares,	54.41	
Communication Service.		
Postage,	.74	
		$405.15
UNEMPLOYMENT RELIEF (Schedule 51).		
Salaries and Wages,	$19,108.18	
Printing, Binding, etc.,	40.38	
Communication Service.		
Postage,	20.00	
Office Supplies,	14.70	
		$19,183.26
VETERANS' HEADQUARTERS (Schedule 52).		
Rent of Quarters for American Legion,		$200.00
WORLD WAR MILITARY SERVICE CENSUS (Schedule 53).		
Miscellaneous Supplies and Expenses,		$44.90
Total General Fund Expense,		$7,826,011.84

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WATER FUND.

WATER DEPARTMENT (Schedule 54).		
Operating Expense.		
Commercial Expense,.....	$22,652.23	
Distribution Expense,.....	75,090.91	
General Expense,.....	35,412.26	
Source of Supply Expense,.....	87,834.99	
Transmission Expense,.....	9,689.18	
Undistributed Expense,.....	3,686.02	
		$234,365.59
*Less Non-Cash Items (Overhead, etc.) in above,		12,636.82
		$221,728.77
Miscellaneous Expense.		
Interest on Bonded Indebtedness,.....	$62,815.00	
Depreciation Charge,.....	94,511.64	
Reserve for Abated Bills,.....	1,927.45	
		159,254.09
Cost of Sales (Chargeable to Consumer),.....	$79,613.18	
*Less Non-Cash Items (Overhead, etc.) in above,.....	4,624.06	
		74,989.12
		$455,971.98
Adjustment to Balance Cash Items,.....		13.41
Total, Water Fund Expense,.....		$455,985.39

*These figures from Water Department records.

SPECIAL AND TRUST FUND.

EVERETT H. BARNEY FUND (Schedule 55).		
Remodeling House,.....	$1,728.53	
Furniture and Furnishings,.....	1,111.94	
Cigars, Candy, etc. (to be sold),.....	754.04	
Miscellaneous Supplies,.....	168.41	
		$3,762.92
SMITH-HUGHES FUND (Schedule 56).		
Teachers' Salaries,.....		2,609.86
Total Special and Trust Fund Expense,		$6,372.78
Total Expense,.....		$8,288,370.01

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OPERATING STATEMENT.

Year Ended November 30, 1921.

GENERAL FUND.			
Revenues Accrued:			
Miscellaneous Sales,	$83,042.58		
Miscellaneous Sources,	1,289,548.61		
Recovered Expenditures,	105,182.70		
Special Assessments,	175,269.65		
Taxes,	6,358,143.16		
		$8,011,186.70	
Expenses Incurred (Schedule I),		7,826,011.84	
Excess—Revenues over Expense,			$185,174.86
WATER FUND.			
Revenues Accrued:			
Miscellaneous Sales,	$77,231.90		
Water Rates,	479,614.12		
		$556,846.02	
Expenses Incurred (Schedule I),		455,985.39	
Excess—Revenues over Expense,			$100,860.63

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GENERAL FUND SURPLUS.

For the Year Ended November 30, 1921.
(Schedule J.)

Debits.		Credits.	
Appropriated in 1921 Budget,	$277,072.00	Surplus, December 1, 1920,	$677,072.33
Reserve for Abatement of Departmental Bills,	39,698.36	Unencumbered Balances of Appropriations, Previous Years,	7,486.17
Adjustment—General Fund Surplus to Water Fund Surplus,	15,025.69	Unencumbered Balances of Appropriations, 1921,	197,419.44
	$331,796.05	Excess of Revenues over Estimate,	122,593.61
Surplus, November 30, 1921,	672,725.50		
	$1,004,521.55		$1,004,521.55

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BUDGETS, 1916—1921.
CITY OF SPRINGFIELD, MASS.
(Schedule K.)

	1916.	1917.	1918.	1919.	1920.	1921.
GENERAL GOVERNMENT.						
City Council,	$1,930.00	$1,970.00	$3,632.00	$4,203.33	$4,295.00	$7,425.00
Mayor,	7,276.50	8,306.50	8,539.58	8,457.00	8,869.00	11,607.00
City Clerk,	11,268.35	11,306.67	11,636.67	14,048.33	16,045.00	17,103.00
Elections,	18,820.90	19,061.67	18,470.00	19,270.00	32,785.00	24,792.00
City Auditor,	9,266.66	9,830.33	12,075.00	13,500.33	15,527.00	16,919.00
City Collector,	17,257.96	18,663.26	21,631.83	24,380.33	31,075.00	34,543.00
City Treasurer,	10,897.66	11,230.01	12,424.44	14,562.08	16,239.00	18,391.00
Administration of Trust Funds,	425.00	435.00	425.00	425.00	425.00	425.00
Assessors, Board of,	19,617.00	25,072.80	25,001.15	29,138.33	41,388.00	49,085.00
License Commissioners, Board of,	500.00	486.85	500.40	1,240.00	700.00	835.00
Law Department,	7,046.34	7,392.85	8,102.64	9,077.66	10,467.00	12,867.00
City Planning Board,	1,000.00	340.00	100.00	.....	.....	21,000.00
Public Works, Board of,	2,187.65	2,476.50	2,489.50	2,399.80	2,600.00	2,994.00
Printing, Committee on,	3,810.13	3,821.67	4,165.00	4,750.00	6,820.00	6,120.00
Municipal Group Buildings,	38,793.45	45,128.99	.....	.....	.....	.....
Municipal Heating Plant,	16,451.88	16,933.96	.....	.....	.....	.....
PROTECTION OF PERSONS AND PROPERTY.						
Fire Department,	319,339.24	290,057.49	.....	.....	.....	.....
Administration,	.....	.....	11,891.00	17,907.84	39,973.00	27,366.00
Fire Alarm,	.....	.....	19,403.87	20,005.00	23,999.00	29,584.00
Operation,	.....	.....	310,949.07	451,440.50	572,775.00	626,052.00
Police Department,	283,883.12	303,768.61	318,861.55	350,324.30	410,106.00	451,720.00
Militia Rifle Range,	1,786.00	928.00	.....	.....	.....	.....
Building Commissioner,	20,281.00	22,119.82	21,350.00	22,979.95	28,456.00	31,985.00
Fish Warden,	25.00	25.00	25.00	25.00	25.00	25.00
Forest Warden,	.....	.....	100.00	100.00	100.00	100.00
Smoke Inspector,	351.00	462.78	360.00	355.00	450.00	470.00
Weights and Measures, Sealer of,	2,595.00	3,816.15	5,518.32	6,135.00	8,026.00	8,859.00
Health Department,	66,605.17	78,209.25	.....	.....	.....	.....
Administration,	.....	.....	16,591.67	19,297.57	22,950.00	25,397.00
Dental Clinic,	.....	.....	2,118.33	3,886.67	6,495.00	7,105.00
Hospital,	.....	.....	42,905.00	46,970.00	55,505.00	59,480.00
Laboratories and Milk Inspection,	.....	.....	7,520.00	7,685.00	9,607.00	10,236.00
Medical Inspection of School Children,	.....	.....	11,470.00	11,932.00	18,140.00	21,954.00
Tuberculosis Dispensary,	.....	.....	1,909.00	2,644.67	3,725.00	4,124.00
Public Sanitary,	4,737.50	.....	.....	.....	.....	.....
Wires, Inspector of,	3,100.00	2,912.24	2,559.00	2,090.00	2,405.00	2,825.00

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BUDGETS, 1916—1921.—Continued.

	1916.	1917.	1918.	1919.	1920.	1921.
PUBLIC WORKS.						
Streets and Engineering, Department of,	$985,843.30	$1,063,506.40	.....	.....	.....	.....
Administration,	.....	.....	$35,287.73	$35,054.25	$37,791.00	$36,859.00
Ashes and Refuse Disposal,	.....	.....	85,358.68	119,094.98	156,637.00	167,270.00
Bridges,	.....	.....	17,854.95	12,637.81	34,071.00	36,740.00
Engineering,	.....	.....	30,922.45	29,724.71	31,338.00	34,596.00
Garbage Collection,	.....	.....	27,347.36	27,446.18	41,630.00	50,150.00
Highways,	.....	.....	235,433.24	250,006.34	346,010.00	437,000.00
Repair Shops,	.....	.....	19,900.53	26,557.52	30,461.00	34,050.00
Sewers,	.....	.....	60,546.84	68,969.74	83,538.00	85,000.00
Sidewalks and Curbing,	.....	.....	39,576.08	43,400.00	44,545.00	64,200.00
Stables and Yards,	.....	.....	92,946.85	132,601.82	173,775.00	202,580.00
Street Cleaning,	.....	.....	94,588.35	91,911.62	198,750.00	136,005.00
Street Lighting,	.....	.....	141,375.94	142,418.33	148,870.00	152,705.00
Street Oiling,	.....	.....	35,648.12	25,418.42	35,205.00	33,075.00
Street Sprinkling,	.....	.....	14,062.50	13,326.25	15,426.00	14,505.00
Public Buildings, Department of:						
Administration,	.....	.....	7,241.75	7,620.00	8,340.00	10,290.00
Militia Rifle Range,	.....	.....	669.00	680.00	895.00	2,721.00
Municipal Group Buildings,	.....	.....	50,178.33	53,847.28	60,561.00	68,537.00
Municipal Heating Plant,	.....	.....	32,948.47	20,611.72	25,313.00	24,468.00
Municipal Organ Concerts,	.....	.....	.....	.....	1,500.00	1,500.00
Schools—Maintenance,	.....	.....	66,105.88	47,971.28	82,378.00	111,560.00
Schools—Operation,	.....	.....	182,550.62	207,739.44	296,194.00	283,377.00
CHARITIES.						
Charities, Department of,	91,750.50	101,065.84	.....	.....	.....	.....
Administration,	.....	.....	12,622.00	13,788.33	16,401.00	18,284.00
Almshouse,	.....	.....	47,782.00	55,840.00	65,023.00	66,819.00
Outside Relief,	.....	.....	47,150.00	60,325.00	69,850.00	96,000.00
Wayfarers' Lodge,	.....	.....	6,093.00	5,179.00	5,600.00	7,917.00
SOLDIERS' AND SAILORS' BENEFITS.						
Soldiers' Relief Commissioner,	21,666.16	21,140.00	20,028.34	21,229.17	23,048.00	41,641.00
Soldiers' and Sailors' Graves, Care of,	800.00	850.00	850.00	850.22	889.00	884.00
Tax Exemptions—Soldiers and Sailors,	.....	2,302.70	1,200.00	1,200.00	1,200.00	1,200.00

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BUDGETS, 1916—1921.—Continued.

	1916.	1917.	1918.	1919.	1920.	1921.
EDUCATION.						
School Department,	$794,279.44	$871,911.30	.....	.....	.....	.....
Administration,	.....	.....	$27,000.67	$30,084.67	$36,720.00	$41,930.00
Central High School,	.....	.....	85,012.50	96,675.00	120,450.00	131,507.00
Continuation School,	.....	.....	.....	.....	13,041.00	50,741.00
Evening Schools:						
Elementary,	.....	.....	5,140.00	5,240.00	5,795.00	.....
Elementary and Extension,	.....	.....	.....	3,741.00	6,461.00	24,100.00
High,	.....	.....	6,735.00	8,395.00	9,715.00	11,460.00
Trades,	.....	.....	8,280.00	7,435.00	9,210.00	12,820.00
Vocational,	.....	.....	4,473.50	2,606.00	2,317.00	3,169.00
Graded Schools and Junior High,	.....	.....	608,127.50	755,987.00	988,287.00	1,148,319.00
Graded Schools Lunches,	.....	.....	.....	1,000.00	2,115.00	1,380.00
High Schools Lunches,	22,600.00	32,500.00	38,784.00	39,606.00	51,283.00	57,163.75
High School of Commerce,	.....	.....	98,342.50	105,700.00	134,975.00	147,170.00
Kindergartens,	.....	.....	41,128.75	51,580.00	65,863.00	80,848.00
Summer Schools,	.....	.....	8,000.00	10,390.00	10,000.00	11,280.00
Summer School, Vocational,	.....	.....	.....	.....	.....	3,252.00
Technical High School,	.....	.....	90,997.50	95,625.00	124,225.00	143,973.00
Vocational School,	.....	.....	19,975.00	22,645.00	24,858.00	37,105.00
Vocational School, Hooker,	.....	.....	.....	.....	6,473.00	.....
Committee on City Property—Schoolhouse Property,	208,337.13	224,842.27	.....	.....	.....	.....
Public Library,	74,111.79	78,934.58	85,853.55	95,059.54	115,971.00	137,737.00
RECREATION.						
Public Parks, Department of,	111,552.52	151,597.97	.....	.....	.....	.....
Administration,	.....	.....	16,060.00	19,330.00	27,465.00	32,878.00
Forestry,	.....	.....	10,943.28	.....	.....	.....
Operation,	.....	.....	96,157.84	141,187.16	183,646.00	215,135.00
DEBT SERVICE.						
Municipal Debt:						
City Debt Serials,	368,200.00*	306,200.00	316,700.00	339,000.00	390,000.00	436,500.00
Sinking Funds,	76,702.88*	44,000.00	43,000.00	33,700.00	28,500.00	28,000.00
Interest,	383,434.75*	302,282.75	333,015.75	371,968.85	405,160.00	474,979.00

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BUDGETS, 1916—1921.—Continued.

	1916.	1917.	1918.	1919.	1920.	1921.
INVENTORY AND STORES.						
City Property Committee on Schoolhouse Property—Stores,	$540.00	$1,404.09	$2,500.00	.....	.....	.....
School Department, Stores,	5,000.00	5,000.00	.....	.....	.....	.....
Streets and Engineering, Department of:						
Stores,	14,558.28	53,612.42	45,000.00	.....	.....	.....
Work in Progress,	53,301.76	.....	.....	.....	.....	.....
UNCLASSIFIED.						
Celebrations,	2,300.00	2,300.00	3,200.00	$17,025.00	$7,175.00	$7,967.50
Damages—Land,	18,880.00	24,837.00	59,687.00	1,880.00	11,540.00	5,000.00
Damages—Persons and Property,	9,124.57	9,395.50	9,000.00	5,000.00	4,000.00	5,000.00
Municipal Automobile,	2,500.00	.....	.....	.....	.....	.....
Municipal Market,	.....	4,100.00	6,000.00	4,000.00	990.45	.....
Municipal Organ,	1,000.00	2,100.00	.....	.....	.....	.....
Refunds,	55,000.00	55,000.00	45,000.00	25,000.00	5,000.00	5,000.00
Reserve for Contingencies,**	8,477.64	42,925.47	39,075.30	8,938.77	5,699.52	11,441.75
Workmen's Compensation,	2,500.00	5,900.00	3,400.00	3,000.00	3,000.00	11,500.00
SPECIAL ACCOUNTS.						
Almshouse Addition,	.....	.....	.....	.....	.....	6,500.00
Armory Street Fire Station,	.....	.....	.....	.....	7,000.00	.....
Army Food Purchase and Sale,	.....	.....	.....	20,000.00	.....	.....
Army Training School,	.....	.....	67,000.00	.....	.....	.....
Berkshire Avenue Bridge,	.....	.....	.....	.....	.....	500.00
Brightwood School Addition,	.....	.....	.....	7,000.00	.....	.....
Chestnut Street School Addition,	.....	17,041.50	.....	1,500.00	.....	.....
Citizens' Protection Fund,	.....	5,000.00	.....	.....	.....	.....
Committee on City Realty,	.....	.....	.....	.....	1,050.00	.....
Committee on Mayor's Messages,	.....	450.00	.....	.....	.....	.....
Committee on Public Safety,	.....	2,000.00	31,000.00	4,114.85	100.00	.....
Committee on Transportation,	.....	.....	.....	.....	.....	450.00
Dwight Street Widening and Extension,	.....	.....	.....	.....	85,000.00	.....
Fair Price Committee,	.....	.....	.....	650.00	.....	.....
Fire Prevention on Schoolhouses,	32,650.00	.....	.....	.....	.....	.....
Forest Park Extension,	.....	.....	.....	.....	.....	10,000.00
Fulton Street Widening,	.....	.....	.....	33,936.47	.....	.....
Homer Street School Addition and Alterations,	.....	.....	.....	20,000.00	.....	.....
Hooker School Public Sanitary,	.....	.....	.....	.....	.....	9,000.00
Hooker School Remodeling,	.....	.....	.....	.....	20,000.00	.....

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BUDGETS, 1916—1921.—Continued.

	1916.	1917.	1918.	1919.	1920.	1921.
SPECIAL ACCOUNTS—*Continued.*						
Influenza Hospital,	.....	.....	.....	$16,000.00	.....	.....
Indian Orchard Fire Station Remodeling,	.....	$27,000.00	.....	.....	.....	.....
Land for Schoolhouse Purposes,	.....	12,767.96	.....	.....	$98,000.00	$14,500.00
Liberty School,	.....	.....	$100,000.00	$1,000.00	5,000.00	.....
Lyman Street Widening,	.....	.....	.....	22,592.50	.....	.....
Military Registration,	.....	101.62	.....	.....	.....	.....
Military Relief Commission,	$2,500.00	5,700.00	32,500.00	26,000.00	.....	.....
Mill Street Engine House Repairs,	.....	.....	.....	20,000.00	.....	.....
Old Toll Bridge Repairs,	.....	.....	11,200.00	60,000.00	.....	.....
Oakland Street Fire Station Remodeling,	.....	1,140.11	.....	.....	.....	.....
Plainfield Street Bridge,	12,000.00	.....	.....	.....	.....	.....
Pynchon Street School Removal,	.....	.....	.....	.....	.....	53,000.00
Revision of Ordinances,	.....	.....	1,000.00	4,000.00	.....	.....
Service Club Rooms,	.....	.....	.....	1,000.00	.....	.....
Soldiers' and Sailors' Memorial Committee,	.....	.....	.....	1,000.00	14,000.00	.....
South End Bridge Repairs,	.....	.....	.....	.....	.....	50,000.00
Springfield—Ludlow Bridge,	.....	.....	.....	.....	30,000.00	.....
Springfield—West Springfield Bridge,	.....	.....	.....	.....	3,500.00	14,000.00
State Street Junior High School,	.....	.....	.....	.....	10,000.00	10,000.00
Street Railway Transportation Survey,	.....	.....	.....	.....	3,000.00	.....
Technical High School Addition,	.....	.....	6,000.00	.....	.....	.....
Van Horn Park Land,	.....	.....	.....	.....	4,700.00	.....
Vocational School Building,	.....	.....	.....	5,000.00	500.00	16,000.00
Unemployment Relief,	.....	.....	.....	.....	.....	25,000.00
Veterans' Headquarters,	.....	.....	.....	.....	.....	400.00
Washington Street School,	.....	.....	.....	9,862.14	.....	.....
Water Street Widening,	.....	.....	57,265.22	7,415.41	.....	.....
Wayfarers' Lodge,	.....	.....	2,625.00	.....	.....	.....
World War Military Service Census,	.....	.....	.....	.....	1,000.00	.....
Total Budgets,	$4,228,813.23	$4,363,665.88	$4,774,173.89	$5,187,550.46	$6,507,995.97	$7,238,027.00

*Includes Water Debt Requirements.

**Transfers from Reserve Fund to the credit of other accounts deducted.

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SALARIES

AS OF NOVEMBER 30, 1921.

Administration of Trust Funds:	
Treasurer,	$300.00
Clerk,	100.00
Assessors, Board of:	
Assessors (3),	3,400.00
Clerks,	$1,000.00 to 1,600.00
Building Department:	
Building Commissioner,	4,200.00
Inspectors of Buildings (3),	2,300.00
Inspector of Elevators,	2,300.00
Inspector of Gas Piping,	2,100.00
Inspector of Inside Wires,	2,400.00
Inspector of Plumbing,	2,400.00
Assistant Inspector of Plumbing,	2,300.00
Assistant Inspectors of Inside Wires (2),	2,100.00
Clerk,	1,400.00
Charities, Department of:	
Agent,	2,400.00
Assistant Agent,	2,000.00
City Physician,	2,400.00
Welfare Nurse,	1,700.00
Clerks,	$900.00 to 1,900.00
Almshouse Master,	1,400.00
City Auditor's Department:	
City Auditor,	4,200.00
Deputy City Auditor,	2,700.00
Clerks,	$1,100.00 to 1,700.00
City Clerk's Department:	
City Clerk,	3,900.00
Assistant City Clerk,	2,800.00
Clerks,	$1,000.00 to 1,250.00
City Collector's Department:	
City Collector,	4,200.00
Deputy Collectors (4),	$1,500.00 to 2,300.00
Clerks,	$1,080.00 to 1,400.00
City Council:	
Clerk, Common Council,	600.00
Messenger,	2,100.00
City Treasurer's Department:	
City Treasurer,	4,500.00
Deputy City Treasurer,	3,000.00
Clerks,	$1,400.00 to 2,400.00
Elections:	
Registrar and Clerk of Board,	550.00
Registrars (3),	500.00
Clerks,	$1,000.00 to 1,450.00

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Fire Department:		
Chief,		$4,000.00
Deputy Chief,		3,100.00
District Chiefs (6),		2,650.00
Captains,		2,350.00
Lieutenants,		2,150.00
Superintendent of Fire Alarm,		2,000.00
Superintendent of Fire Apparatus Repairs,		2,350.00
Engineers,		1,994.50
Firemen—Grade A,	(day)	5.27
Firemen—Grade B,	(day)	4.99
Firemen—Grade C,	(day)	4.71
Clerks,		1,760.00
Fish Warden,		25.00
Forest Warden,		100.00
Health Department:		
Agent,		2,800.00
Dentists (3),		900.00
Health Physician,		2,800.00
Inspector of Meats and Provisions,		1,200.00
Inspector of Milk and Vinegar,		1,900.00
Inspector of Slaughtering,		300.00
Assistant Inspector of Milk and Vinegar,		2,000.00
Sanitary Inspector, Chief,		2,300.00
Sanitary Inspectors (6),		$1,500.00 to 2,000.00
Medical Inspectors of School Children (14),		600.00
Nurses:		
Department (1),		1,400.00
Child Welfare (1),		1,800.00
School (9),		$1,200.00 to 1,500.00
Dispensary,		1,500.00
Hospital (8),		$840.00 to 960.00
Matron,		1,400.00
Clerks,		$900.00 to 1,500.00
Law Department:		
City Solicitor,		4,500.00
Assistant City Solicitor,		2,250.00
City Prosecuting Attorney,		2,250.00
Clerk,		1,500.00
License Commissioners, Board of:		
Chairman,		250.00
Mayor's Department:		
Mayor,		6,000.00
Clerk,		1,700.00
Police Department:		
Chief,		3,900.00
Deputy Chief,		2,650.00
Captain of Detectives,		2,350.00
Captains,		2,250.00
Detective Lieutenants,		2,050.00
Lieutenants,		2,050.00
Detective Sergeants,		1,950.00

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Sergeants,	$1,950.00
Patrolmen—Grade A,	(day) 5.00
Patrolmen—Grade B,	(day) 4.72
Patrolmen—Grade C,	(day) 4.44
Reservemen and Specials,	(day) 4.00
Lockup Keeper,	25.00
Matrons,	1,000.00
Superintendent of Police Signal System,	600.00
Clerk of Board of Police Commissioners,	200.00
Clerks,	$886.00 to 1,300.00
Printing Expert,	750.00
Public Buildings, Department of:	
Superintendent,	3,500.00
Clerk and Purchasing Agent,	2,086.00
Clerks,	$782.00 to 1,200.00
Public Parks, Department of:	
Superintendent,	4,000.00
Assistant Superintendent,	2,347.00
Director of Recreation,	2,000.00
Clerk,	1,900.00
School Department:	
Superintendent,	5,800.00
Assistant Superintendent,	3,500.00
Chief Clerk,	2,800.00
Attendance Officer,	2,300.00
Assistant Attendance Officers (3),	$1,700.00 to 1,900.00
Clerks,	$900.00 to 1,650.00
Smoke Inspector,	300.00
Soldiers' and Sailors' Benefits:	
Soldiers' Relief Commissioner,	2,100.00
Supervisor of Soldiers' and Sailors' Graves,	200.00
Clerk,	1,000.00
Streets and Engineering:	
Superintendent,	4,400.00
Superintendent, Division of Streets,	3,300.00
Superintendent, Division of Engineering,	2,800.00
Superintendent, Division of Sewers,	2,900.00
Superintendent, Division of Ashes, Refuse, and Garbage,	2,500.00
Superintendent, Division of Street Lighting,	1,200.00
Purchasing Agent,	2,000.00
Clerks,	$782.00 to 2,000.00
Water Department:	
Chief Engineer,	5,000.00
Assistant Engineer,	3,000.00
Superintendent,	3,650.00
Assistant Superintendent,	3,200.00
Registrar,	2,850.00
Chemist,	1,800.00
Clerks,	$782.00 to 2,300.00
Weights and Measures, Department of:	
Sealer,	2,500.00
Deputy Sealers (2),	1,700.00
Clerk,	850.00
Wires, Inspector of (Outside),	500.00

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SINKING FUNDS

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REPORT

OF THE

COMMISSIONERS OF THE SINKING FUNDS

SPRINGFIELD, MASS., November 17, 1921.

To His Honor, the Mayor, and the City Council.

GENTLEMEN:—The Commissioners of the Sinking Funds of the City of Springfield have the honor to report the condition of the sinking funds, established to meet indebtedness of the city, and the income accruing to the same for the year ending November 17, 1921, as follows:—

WATER WORKS.

Loan $150,000, 4% bonds, October 1, 1893, 30 years.

RECEIPTS.

Amount on hand at last report	$107,601.16	
Surplus balance from the Water Department for 1920, received December 28, 1920	14,378.49	
Interest on bank balances	329.04	
Interest on investments	4,895.00	
Addition of difference between price paid and par value of bonds purchased during the year	243.00	
	$127,446.69	
Accrued interest paid on bonds—charged off	380.00	
		$127,066.69

INVESTMENTS.

United States Liberty Loan bonds	$38,000.00	
City of Springfield bonds	26,000.00	
Municipal bonds	40,000.00	
Railroad bonds	20,000.00	
Cash in bank at interest	3,066.69	
		$127,066.69

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SCHOOL LOANS.

$823,000 Twenty Year School Loans, maturing as follows:—
$125,000 3½% bonds, due September 1, 1921 (closed).
55,000 3½% bonds, due October 1, 1922.
40,000 3½% bonds, due September 1, 1923.
396,000 3½% bonds, due January 1, 1925.
207,000 4 % bonds, due November 1, 1926.

RECEIPTS.

Amount on hand at last report	$680,454.30	
Appropriation of City Council received November 15, 1921	25,000.00	
Interest on bank balances	278.75	
Interest on investments	27,363.26	
Addition of difference between price paid and par value of bonds bought during the year	47.20	
	$733,143.51	
Accrued interest paid on bonds—charged off	600.30	
	$732,543.21	
Premium paid on bonds—charged off	552.50	
	$731,990.71	
Paid City Treasurer to meet 3½% School Loan 1901 bonds, maturing September 1, 1921	125,000.00	
		$606,990.71

INVESTMENTS.

United States Liberty Loan bonds	$186,000.00	
City of Springfield bonds	278,000.00	
Municipal bonds	67,000.00	
Massachusetts, Commonwealth of	5,000.00	
Railroad bonds	46,500.00	
Street Railway bonds	2,500.00	
Cash in bank at interest	21,990.71	
		$606,990.71

SEWER LOAN, 1900.

Loan $142,000, 3% bonds, June 1, 1900, 30 years.

RECEIPTS.

Amount on hand at last report	$94,709.29	
Appropriation of City Council received November 15, 1921	1,500.00	
Interest on bank balances	127.94	
Interest on investments	3,475.00	
		$99,812.23

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INVESTMENTS.

United States Liberty Loan bonds	$8,000.00	
City of Springfield bonds	43,000.00	
Municipal bonds	16,000.00	
Railroad bonds	19,000.00	
Street Railway bonds	5,200.00	
Cash in bank at interest,	8,612.23	
		$99,812.23

PUBLIC PARK LOAN, 1903.

Court Square Extension.

Loan $125,000, 3½% bonds, June 1, 1903, 20 years.

RECEIPTS.

Amount on hand at last report	$115,981.17	
Appropriation of City Council received November 15, 1921	1,500.00	
Interest on bank balances	145.18	
Interest on investments	4,423.27	
Addition of difference between price paid and par value of bonds bought during the year	160.40	
	$122,210.02	
Accrued interest paid on bonds—charged off	253.33	
		$121,956.69

INVESTMENTS.

United States Liberty Loan bonds	$33,000.00	
City of Springfield bonds,	42,000.00	
Municipal bonds	16,000.00	
Railroad bonds	13,000.00	
Street Railway bonds	7,700.00	
Cash in bank at interest	10,256.69	
		$121,956.69

RECAPITULATION.

REVENUE FROM ALL SOURCES.

Surplus balance from Water Department, received December 28, 1920	$14,378.49
Appropriation of City Council received November 15, 1921	28,000.00
Interest on bank balances	880.91
Interest on investments	40,156.53
Addition of difference between price paid and par value of bonds bought during the year,	450.60
Total revenue	$83,866.53

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Brought forward		$83,866.53	
Amount on hand at last report		998,745.92	
		$1,082,612.45	
Accrued interest paid on bonds—charged off	$1,233.63		
Premium paid on bonds—charged off	552.50		
		1,786.13	
			$1,080,826.32
Paid City Treasurer, September 1, 1921, to meet 1901 School Loan bonds			125,000.00
			$955,826.32

INVESTED AS FOLLOWS:—

United States Liberty Loan bonds	$210,000.00		
United States Certificates indebtedness	55,000.00		
		$265,000.00	
Massachusetts, Commonwealth of, bonds		5,000.00	
Municipal and Town bonds		528,000.00	
Railroad bonds		98,500.00	
Street Railway bonds		15,400.00	
			$911,900.00
Cash in bank at interest			43,926.32
Total,			$955,826.32

Respectfully submitted,

ROBERT O. MORRIS,
A. B. WALLACE,
A. WILLARD DAMON,
Commissioners of the Sinking Funds.

ELIPHALET T. TIFFT, *Treasurer.*

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REPORT OF THE MANAGERS

OF THE

Dr. DAVID P. SMITH FUND

FOR THE YEAR ENDING DECEMBER 31, 1921.

To His Honor, the Mayor, and the City Council:—

The managers present herewith their ninth report, which deals with the expenditure of the income from the David P. Smith Fund for the past year.

Reference is made to the first report published in the Municipal Register of 1914 for a history of the fund, its purpose and method of distribution.

The Treasurer's summary is as follows:—

Balance in fund January 1, 1921,		$488.32
Income received during 1921,		1,270.33
		$1,758.65
Expended for aid of sick children,	$1,565.33	
Union Trust Company for services,	100.00	
Expended for blanks,	.78	
		1,666.10
Balance on hand January 1, 1922,		$92.55

The David P. Smith Fund was given over to the City of Springfield in April, 1912. Since that time to the present date there has been expended for the aid and relief of nine hundred and sixty of the city's "poor, sick children," $11,312.94, income received from the fund and used as stipulated in the ninth clause of the will of Dr. David P. Smith.

Respectfully submitted,

EDWIN F. LEONARD, *Mayor*,
WM. J. QUILTY, *Chief of Police*,
ELIPHALET T. TIFFT, *City Treasurer*,
Managers.

ELIPHALET T. TIFFT,
Treasurer and Secretary.

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CITY TREASURER'S REPORT.

NOVEMBER 30, 1921.

With Certificate of City Auditor Attached.

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CITY TREASURER'S REPORT

CITY OF SPRINGFIELD, MASS.
CITY TREASURER'S OFFICE, December 31, 1921.

To His Honor, the Mayor, and the City Council:—

I have the honor to submit herewith my thirty-fourth annual report as City Treasurer, showing the operation and condition of the City Treasury and Sinking Funds; and presenting other information relative to finances of the City of Springfield for the fiscal year ending November 30, 1921.

The total operation of the City Treasury for the fiscal year 1921 are summarized as follows:—

CASH RECEIPTS.		CASH PAYMENTS.	
From Revenue sources	$13,606,175.92	For Revenue purposes, as per Treasury Warrants,	$13,854,602.32
From Non-Revenue sources	1,346,892.55	For Non-Revenue purposes, as per Treasury Warrants	1,111,634.93
	$14,953,068.47		$14,966,237.25
Cash and paid vouchers on hand December 1, 1920	864,968.34	Cash and paid vouchers on hand November 30, 1921	851,799.56
	$15,818,036.81		$15,818,036.81

The following statement gives more detail in reference to receipts and payments:—

REVENUE CASH RECEIPTS.

From Collector:—	
Taxes of 1918	$3.88
Taxes of 1919	2,635.22
Taxes of 1920	1,389,832.97
Taxes of 1921	4,620,341.93
Taxes paid after abatement	15.16
Amount carried forward,	$6,012,829.16

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Amount brought forward,	$6,012,829.16	
Street Watering Taxes, 1919	9.85	
Street Watering Taxes, 1920	8,946.67	
Street Watering Taxes, 1921	28,994.15	
Water sales	474,946.02	
Water, miscellaneous sales	81,542.11	
Department bills collected	380,141.62	
Interest on taxes, bank balances, and department bills	44,072.31	
Collector's official fees	7,101.64	
Auditorium rentals	14,420.00	
Organ rentals	495.00	
School halls, rentals	343.00	
Tax titles	2,928.63	
Licenses:—		
Sunday sales	390.00	
Common victualers	270.00	
Innholders	10.00	
Lodging houses	124.00	
License Commissioners, recording licenses	134.00	
Licenses, Sunday theaters	7,748.00	
Licenses, theaters	1,330.85	
Licenses, dance, elevators, exhibition, etc.	1,368.00	
Licenses issued by the Police Commissioners	9,252.77	
		$7,077,397.78
From the Commonwealth of Massachusetts:—		
Corporation tax, public service and business, balance of 1915–1919	$694.47	
Corporation tax, public service, 1920 and 1921	62,288.38	
Corporation tax, domestic	453,423.25	
Corporation tax, foreign	59,305.62	
Income tax, 1918	3,725.00	
Income tax, 1919	12,264.00	
Income tax, 1920	163,520.00	
Income tax, 1921, general purposes	233,270.72	
Income tax, 1921, general school purposes	158,949.66	
Civilian war tax	4,596.00	
National bank tax, 1921	8,067.89	
Reimbursement of State and Military aid of 1920	9,385.00	
Reimbursement for burials of indigent soldiers and sailors	477.63	
Amounts brought forward,	$1,169,967.62	$7,077,397.78

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Amounts brought forward,	$1,169,967.62	$7,077,397.78
Reimbursement of one half cost of maintenance of Vocational education, school years of 1919 and 1920...	12,748.73	
Reimbursement of one half expense Americanization work, year of 1921..	5,945.99	
Reimbursement of war poll tax.....	318.00	
Reimbursement of hawkers' and peddlers' licenses.....	525.00	
Vocational School, Smith-Hughes fund, federal funds for vocational education.....	2,046.34	
		1,191,551.68
From County Treasurer, Dog fund of 1920 for City Library Association.....		5,736.57
Premium on bonds dated October 1, 1921:—		
$200,000 Dwight and Water Streets Railroad Underpass loan.....	$2,820.00	
$600,000 Junior High School, State Street.....	8,460.00	
$250,000 Taylor and Stafford Streets Extension.....	3,525.00	
$225,000 Sewer bonds, 1921 loan.....	3,172.50	
From Commissioners of the Sinking Funds to meet 3½% 1901 School bonds, due September 1, 1921.....	125,000.00	
High Schools' Lunch fund, sale of lunches...	47,831.51	
Interest on Treasurer's bank balances.....	12,565.44	
Interest, accrued on bonds.....	281.95	
City Clerk's official fees and interest.....	6,885.51	
Sealer's fees.....	1,099.04	
Licenses collected by City Treasurer:—		
Sunday sales.....	945.00	
Common victualers.....	550.00	
Innholders.....	55.00	
Liquor.....	26.00	
Milk and oleomargarine.....	525.50	
License Commissioners, recording licenses..	336.00	
Return of money advanced sundry departments to meet petty cash expenses...	7,525.00	
Sale of land on Boston road formerly used by city as a pound.....	50.00	
Trust Funds:—		
Everett H. Barney fund, from trustees of Everett H. Barney estate.....	10,000.00	
Gurdon Bill fund, interest.....	277.55	
Amounts carried forward,	$231,931.00	$8,274,686.03

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Amounts brought forward,	$231,931.00	$8,274,686.03
Wm. H. Smith fund, interest	56.06	
Chas. S. Marsh fund, interest	28.47	
Departmental receipts, revenue	29,641.97	
Departmental receipts, refunds	4,353.10	
Water Works, refunds	3,351.67	
Premium on temporary loans	1.00	
Transfers:—		
Public Parks, from Water Works	73.00	
Streets and Engineering Department, from Indian Orchard bridge	6,287.06	
Transfers from Non-Revenue Cash:—		
Streets and Engineering:—		
From surface sewer construction, 1919	3,609.43	
From surface sewer construction, 1921	202,162.08	
From Stafford street extension	36,408.65	
From Taylor street extension	11,503.16	
From Pearl street widening	2,061.27	
From Vocational School building	21.97	
		531,489.89
Total receipts		$8,806,175.92
Temporary loans in anticipation of revenue	$4,800,000.00	
Cash and paid vouchers on hand, December 1, 1920	93,391.69	
Temporary transfer from non-revenue	155,034.71	
		5,048,426.40
		$13,854,602.32

REVENUE CASH PAYMENTS.

Payments as per Treasury Warrants, Nos. 87 to 90, inclusive, 1920, and Nos. 1 to 87, inclusive, 1921	$13,854,602.32

NON-REVENUE CASH RECEIPTS.

Funded Debt:—		
Junior High School, State Street Loan, 20 years, 4½% coupon or registered, dated October 1, 1921, payable $30,000 each year 1922 to 1941, inclusive	$600,000.00	
Amount carried forward,	$600,000.00	

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Amount brought forward,	$600,000.00	
Dwight and Water Streets Railroad Underpass Loan, 10 years, 5% coupon or registered, dated October 1, 1921, payable $20,000 each year, 1922 to 1931, inclusive (Acts of 1912), exempt	200,000.00	
Taylor and Stafford Streets Extension Loan, 10 years, 5% coupon or registered, dated October 1, 1921, payable $25,000 each year 1922 to 1931, inclusive (Acts of 1921), exempt	250,000.00	
Sewer Bonds, 1921 Loan, 30 years, 5% coupon or registered, dated October 1, 1921, payable $8,000 each year 1922 to 1936, inclusive, and $7,000 each year 1937 to 1951, inclusive	225,000.00	
		$1,275,000.00
Fulton Street Widening, sale of remnants of land purchased for widening of Fulton street	4,382.54	
Dwight Street Widening and Extension, sale of land at corner of East Court and Dwight streets, remnants of land purchased for widening of Dwight street	37,900.00	
Sale of land and building, Mill River lane, formerly Mill River fire station	3,000.00	
Sale of land, Rushville	250.00	
Sale of building, Vernon street, owned by trustees of Essex Associates, city's share	191.25	
Transfer from Revenue Cash:—		
Vocational School building	16,168.76	
Junior High School, State street	10,000.00	
		$71,892.55
Total receipts		$1,346,892.55
Cash on hand December 1, 1920		771,576.65
		$2,118,469.20

NON-REVENUE CASH PAYMENTS.

Payments as per Treasury Warrants, Nos. 87 to 90, inclusive, 1920, and 1 to 87, inclusive, 1921	$1,111,634.93	
Cash and paid vouchers on hand November 30, 1921	851,799.56	
Temporary transfer to revenue cash	155,034.71	
		$2,118,469.20

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TEMPORARY LOANS.

Made in Anticipation of Revenue and Paid within One Year.

1920, Dec. 29—	$500,000	due June 9, 1921, Salomon Bros. & Hutzler, New York, discounted at	5.89%
1921, Mar. 11—	600,000	due November 10, 1921, Estabrook & Co., Boston, discounted at.....	5.79%
April 21—	400,000	due November 10, 1921, Salomon Bros. & Hutzler, New York, discounted at.....	5.79%
May 23—	400,000	due November 4, 1921, Old Colony Trust Co., Boston, discounted at..	5.65%
June 8—	1,100,000	due November 11, 1921, First National Bank, Boston, discounted at...	5.79%
June 13—	300,000	due October 14, 1921, First National Bank, Boston, discounted at.....	5.75%
June 13—	300,000	due November 2, 1921, First National Bank, Boston, discounted at.....	5.75%
Aug. 1—	100,000	due November 23, 1921, Union Trust Co., Springfield, discounted at...	5.20%
Aug. 1—	100,000	due November 23, 1921, Third National Bank, Springfield, discounted at	5.20%
Aug. 12—	100,000	due November 23, 1921, Springfield Safe Deposit & Trust Co., discounted at.....	5.20%
Aug. 29—	50,000	due November 23, 1921, Third National Bank, Springfield, discounted at.....	5.15%
Aug. 29—	50,000	due November 23, 1921, Union Trust Co., Springfield, discounted at....	5.15%
Sept. 12—	100,000	due November 16, 1921, Old Colony Trust Co., Boston, discounted at..	5.15%
Sept. 12—	50,000	due November 16, 1921, Springfield National Bank, discounted at.....	5.15%
Sept. 20—	50,000	due November 16, 1921, Third National Bank, Springfield, discounted at...	5.00%
Nov. 18—	600,000	due June 8, 1922, Harris Forbes & Co., Inc., Boston, discounted at.....	4.28%
	$4,800,000		

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STATEMENT OF BONDED DEBT AND SINKING FUNDS, 1921.

SHOWING DEBT AND SINKING FUNDS AT BEGINNING AND CLOSE OF FISCAL YEAR, AND ALL TRANSACTIONS DURING THAT PERIOD

	Total Debt.	Divisions of Total Indebtedness.			Total Net Debt.	Net Debt Exclusive of Water Debt.	Net Debt Within Limit.	Net Water Debt.	Sinking Funds.	
		Debt Within Limit.	Debt Outside Limit.	Water Debt.					General Sinking Fund	Water Sinking Fund
December 1, 1920	$10,091,500.00	$4,932,500.00	$3,433,000.00	$1,726,000.00	$9,092,754.08	$7,474,355.24	$4,041,355.24	$1,618,398.84	$891,144.76	$107,601.16
Bonds paid in 1921	650,500.00	404,500.00	157,000.00	89,000.00	.....	.....	.....	.....	.....	.....
Bonds issued in 1921	1,275,000.00	825,000.00	450,000.00	.....	.....	.....	.....	.....	.....	.....
Appropriations for General Sinking Fund	.....	.....	.....	.....	.....	.....	.....	.....	28,000.00	.....
Surplus in Water Dept., 1920, available for Sinking Fund	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,378.49
Earnings in General Sinking Funds	.....	.....	.....	.....	.....	.....	.....	.....	34,614.87	.....
Earnings in Water Sinking Fund	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,087.04
Decrease in Total and Net Water Debt	.....	.....	.....	89,000 00	.....	.....	.....	108,465.53	.....	.....
Decrease in General Sinking Funds	.....	.....	.....	.....	.....	.....	.....	.....	62,385.13	.....
Increase in Water Sinking Fund	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,465.53
Increase in Total and Net Debt	624,500.00	.....	.....	.....	667,419.60	.....	.....	.....	.....	.....
Increase in Debt Within and Outside of Limit	.....	420,500.00	293,000.00	.....	.....	.....	.....	.....	.....	.....
Increase in Net Debt Within Limit	.....	.....	.....	.....	.....	.....	482,885.13	.....	.....	.....
Increase in Net Debt Exclusive of Water Debt	.....	.....	.....	.....	.....	775,885.13	.....	.....	.....	.....
Bonds paid from General Sinking Funds	.....	.....	.....	.....	.....	.....	.....	.....	125,000.00	.....
November 30, 1921	$10,716,000.00	$5,353,000.00	$3,726,000.00	$1,637,000.00	$9,760,173.68	$8,250,240.37	$4,524,240.37	$1,509,933.31	$828,759.63	$127,066.69

Outstanding Bonds secured by Sinking Funds $1,115,000.00.
Outstanding Serial Bonds.....9,601,000.00.
Total City Debt.....$10,716,000.00.

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CITY OF SPRINGFIELD, MASS.

DECEMBER 1, 1921

STATEMENT OF THE BONDED DEBT AND SINKING FUNDS

LOANS. NAME AND DESCRIPTION.	Date of Issue.	INTEREST. Rate %	INTEREST. Payable.	PRINCIPAL. When Due.	PRINCIPAL. Outstanding.	Sinking Funds.
City Hall Loan, 1907, Reg	1907	4	J. & J.	July 1, 1908 to July 1, 1927. $9,000 even years, $8,000 odd years.	$51,000.00	
Dwight and Water Streets, Railroad Underpass Loan, Cou. or Reg	1913	4	May & N.	$14,000 due Nov. 1, 1914 to Nov. 1, 1923. $13,000 due Nov. 1, 1924 to Nov. 1, 1943.	288,000.00	
Dwight and Water Streets, Railroad Underpass Loan, Act of 1913, Cou. or Reg	1915	4	May & N.	Nov. 1, 1916 to Nov. 1, 1935. $10,000 annually.	140,000.00	
Dwight and Water Streets, Railroad Underpass Loan, Act of 1921	1921	5	A. & O.	Oct. 1, 1922 to Oct. 1, 1931. $20,000 annually...	200,000.00	
Dwight, Willow and Hillman Street Extension.	1915	4	May & N.	Nov. 1, 1916 to Nov. 1, 1925. $7,000 annually..	28,000.00	
Dwight Street Widening and Extension, C. or R.	1917	4½	Jne. & D.	Dec. 1, 1918 to Dec. 1, 1937. $40,000 annually..	680,000.00	
Dwight St. Widening and Exten., Cou. or Reg..	1918	4	Jne. & D.	Dec. 1, 1919 to Dec. 1, 1938. $10,000 annually...	180,000.00	
Dwight St. Widening and Exten., Cou. or Reg..	1919	4½	Jne. & D.	Dec. 1, 1919 to Dec. 1, 1938. $25,000 annually.	450,000.00	
Dwight St. Widening and Exten., Cou. or Reg.	1920	5	A. & O.	Oct. 1, 1921 to Oct. 1, 1940. $10,000 annually ..	190,000.00	
Fire and Police Buildings Loan, Reg	1910	4	A. & O.	Oct. 1, 1911 to Oct. 1, 1930. $17,000 annually...	153,000.00	
Fulton Street Loan, Cou. or Reg	1914	4½	May & N.	$20,000 each yr., Nov. 1915 to 1934	260,000.00	
Land and Buildings Loan, Cou. or Reg	1917	4½	May & N.	Nov. 1, 1918 to Nov. 1, 1937 inc. $15,000 annually	240,000.00	
Municipal Building Loan, Act of 1909, Cou. or Reg.	1909	3½	May & N.	Nov. 1, 1910 to Nov. 1, 1949. $15,000 annually..	420,000.00	
Municipal Building Loan, Act of 1909, Cou. or Reg.	1910	4	May & N.	Nov. 1, 1911 to Nov. 1, 1950. $10,000 annually..	290,000.00	
Municipal Building Loan, Act of 1912, Cou. or Reg.	1912	4	May & N.	$14,000 due Nov. 1, 1913 to 1917 inc. and $13,000 Nov. 1, 1918 to 1952 inc	403,000.00	
Municipal Building Loan, Act of 1912, Cou. or Reg.	1914	4	May & N.	$5,000 each yr., Nov. 1915 to 1954	165,000.00	
Municipal Building Loan, Act of 1912, Reg	1920	5	A. & O.	Oct. 1, 1921 to Oct. 1, 1935. $5,000 annually....	70,000.00	
Municipal Loan, Reg	1913	4¼	May & N.	$6,500 due Nov. 1, 1914 and $6,000 Nov. 1, 1915 to Nov. 1, 1918; $5,000, Nov. 1, 1919 to Nov. 1, 1923	10,000.00	
Municipal Purposes, Land for, Reg	1920	5	A. & O.	Oct. 1, 1921 to Oct. 1, 1940. $3,500 annually...	66,500.00	
Public Parks, Reg	1903	3½	Jne. & D.	June 1, 1923	125,000.00	$121,956.69
Public Buildings Loan, Reg	1911	4	A. & O.	Oct. 1, 1912 to Oct. 1, 1931. $16,000 annually...	160,000.00	
School Bonds 1902, Reg	1902	3½	A. & O.	October 1, 1922	55,000.00	
" " 1903, Cou. or Reg	1903	3½	M. & S.	September 1, 1923	40,000.00	
" Technical High, Reg	1905-6	3½	J. & J.	January 1, 1925	342,000.00	606,990.71
" White Street, Reg	1905	3½	J. & J.	January 1, 1925	54,000.00	
" Loan, 1906, Cou. or Reg	1906	4	May & N.	November 1, 1926	207,000.00	

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STATEMENT OF THE BONDED DEBT AND SINKING FUNDS—*Continued.*

LOANS. NAME AND DESCRIPTION.	Date of Issue.	INTEREST. Rate %	INTEREST. Payable.	PRINCIPAL. When Due.	PRINCIPAL. Outstanding.	Sinking Funds.
School Bonds, Commercial High, Cou.	1913	4	May & N.	$25,000 due Nov. 1, 1914 to Nov. 1, 1933	$300,000.00	
" " Commercial High, Cou.	1914	4½	May & N.	$8,000 Nov. 1, 1915 to 1924. $7,000 Nov. 1, 1925 to 1934.	94,000.00	
" " Commercial High, Cou.	1915	4	May & N.	$18,000 Nov. 1, 1916 to 1925. $17,000 Nov. 1, 1926 to 1935.	242,000.00	
" " Kensington Avenue, 1908, Reg.	1908	4	A. & O.	Oct. 1, 1909 to Oct. 1, 1928. $5,500 annually	38,500.00	
" " Lincoln, Reg.	1909	4	A. & O.	Oct. 1, 1910 to Oct. 1, 1929. $5,000 annually	40,000.00	
" Buckingham, Reg.	1913	4¼	May & N.	$11,000 due Nov. 1, 1914 to Nov. 1, 1933	132,000.00	
" Reg.	1913	4¼	May & N.	$2,000 due Nov. 1, 1914 to 1932, and $1,500 Nov. 1, 1933	23,500.00	
" Bonds, 1916, Reg.	1916	4	May & N.	Nov. 1, 1917 to Nov. 1, 1936. $27,000 annually	405,000.00	
" Bonds, 1919, Cou. or Reg.	1919	4¼	May & N.	Nov. 1, 1920 to Nov. 1, 1938. $33,000 annually	561,000.00	
" Bonds, 1920, Cou. or Reg.	1920	5	A. & O.	Oct. 1, 1921 to Oct. 1, 1940. $13,000 annually	247,000.00	
School—Junior High, Cou. or Reg.	1920	5	A. & O.	Oct. 1, 1921 to Oct. 1, 1940. $10,000 annually	190,000.00	
" " " Cou. or Reg.	1921	4½	A. & O.	Oct. 1, 1922 to Oct. 1, 1941 inc. $30,000 annually	600,000.00	
School and Fire Loan, Reg.	1914	4½	May & N.	$13,000 Nov. 1915 to 1924. $12,000 Nov. 1925 to 1934.	159,000.00	
Sewer Bonds, Cou. or Reg.	1900	3	Jne. & D.	June 1, 1930	142,000.00	$99,812.23
" " 1901, Reg.	1901	3½	Mch. & S.	Sept. 1, 1902 to 1926. $1,000 annually	5,000.00	
" Loan, 1904, "	1904	3½	F. & A.	Aug. 1, 1905 to 1924. $2,000 annually	6,000.00	
" " 1908, "	1908	4	A. & O.	Oct. 1, 1909 to Oct. 1, 1928. $2,500 annually	17,500.00	
" " Reg.	1913	4	May & N.	$2,000 due Nov. 1, 1914 to Nov. 1, 1933	34,000.00	
" Bonds, Reg.	1919	4½	J. & J.	July 1, 1920 to July 1, 1944. $2,000 annually	46,000.00	
" " 1921, Cou. or Reg.	1921	5	A. & O.	Oct. 1, 1922 to Oct. 1, 1936 inc. $8,000 an'ly. Oct. 1, 1937 to Oct. 1, 1951 inc. $7,000 an'ly.	225,000.00	
Taylor and Stafford Streets Extension	1921	5	A. & O.	Oct. 1, 1922 to Oct. 1, 1931 inc. $25,000 annually	250,000.00	
Water Street Widening, Reg.	1920	5	A. & O.	Oct. 1, 1921 to Oct. 1, 1930. $6,000 annually	54,000.00	
Water Bonds, Coupon	1893	4	A. & O.	October 1, 1923	150,000.00	127,066.69
" " Little River, Cou. or Reg.	1907	4	J. & J.	Jan. 1, 1910 to Jan. 1, 1936. $10,000 annually	150,000.00	
" " Little River, Cou. or Reg.	1908	4	J. & J.	Jan. 1, 1911 to Jan. 1, 1937. $10,000 annually	160,000.00	
" " Little River, Cou. or Reg.	1909	3½	J. & J.	Jan. 1, 1912 to Jan. 1, 1938. $40,000 annually	680,000.00	
" " Little River, Cou. or Reg.	1910	3½	J. & J.	Jan. 1, 1913 to Jan. 1, 1939. $14,000 annually	252,000.00	
" " Little River, Cou. or Reg.	1913	4¼	May & N.	$10,000 due Nov. 1, 1914 to Nov. 1, 1938	170,000.00	
" " Little River, Cou. or Reg.	1916	3½	May & N.	Nov. 1, 1917 to Nov. 1, 1936. $5,000 annually	75,000.00	
Totals					$10,716,000.00	$955,826.32

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PURPOSES FOR WHICH OUTSTANDING BONDED DEBT WAS CREATED.

Water Works (exempt)			$1,637,000
Schoolhouses:—			
Technical High School	$432,000		
High School of Commerce	636,000		
Junior High School	790,000		
Other Schools	2,104,900		
		$3,962,900	
Dwight and Water streets railroad underpasses (exempt)		628,000	
Dwight-Willow and Hillman streets extension		28,000	
Dwight street widening and extension (exempt)		1,500,000	
Emery street storehouse (addition)		17,200	
Fire department buildings		70,002	
Fire and Police headquarters		153,000	
Fulton street widening		260,000	
Health department hospital		9,000	
Laundry and heating plant, almshouse		7,898	
Municipal heating plant		39,000	
Municipal Group buildings and land (exempt)		1,348,000	
Municipal Group, land		98,500	
Parks and buildings		162,000	
Sewers		475,500	
Taylor and Stafford streets extension (exempt)		250,000	
Wayfarers' Lodge		16,000	
Water street widening		54,000	
Debt exclusive of water debt			9,079,000
Total debt			$10,716,000

The above debt is issued at the following rates of interest:—

$142,000 at 3 per cent per annum.
2,054,000 at 3½ per cent per annum.
3,602,000 at 4 per cent per annum.
896,500 at 4¼ per cent per annum.
2,529,000 at 4½ per cent per annum.
1,492,500 at 5 per cent per annum.

Total, $10,716,000 at an average interest rate of 4.17 per cent per annum.

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AMOUNT OF DEBT CITY CAN INCUR WITHIN STATUTORY LIMIT.

2½ per cent of $225,502,870 average valuation for three preceding years		$5,637,571
Bonded debt other than water debt	$9,079,000	
Less debt exempted by special acts of the legislature	3,726,000	
	$5,353,000	
Less general sinking funds	828,760	
		4,524,240
Debt city can incur in 1922		$1,113,331

The funded debt maturing in 1922 totals $662,500. Of this amount $89,000 is Water Debt, which will be paid from receipts of the Water Department, $55,000 for which sinking funds are provided, and $518,500 serial bonds for sundry purposes, that will have to be appropriated for and paid from the tax levy.

The sinking funds will require an appropriation of $18,000.

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The following table compiled from previous reports, compares the appropriations, funded water debt, funded debt other than water, sinking funds, tax rate, and the assessors' valuation of real and personal property from the year 1890 to 1921 inclusive:—

Year.	Appropriations.	Water Debt.	Other Debt.	Sinking Funds.	Tax Rate.	Assessors' Valuation, Real and Personal.
1890	$507,450	$1,325,000	$124,000		$12.40	$44,493,633
1891	574,425	1,325,000	214,000	$22,734	12.50	48,329,634
1892	609,715	1,325,000	275,000	45,259	13.00	50,780,987
1893	664,050	1,675,000	263,000	75,202	12.80	55,239,919
1894	664,000	1,650,000	280,000	112,207	12.00	56,449,425
1895	732,300	1,625,000	319,500	192,297	12.20	59,033,141
1896	801,100	1,600,000	339,000	254,340	12.80	61,416,091
1897	872,300	1,575,000	783,500	357,471	13.00	64,898,379
1898	909,650	1,550,000	997,000	411,855	13.80	65,699,713
1899	978,175	1,525,000	968,800	506,654	13.60	69,869,847
1900	1,030,000	1,500,000	1,227,100	595,282	13.80	72,358,481
1901	1,075,500	1,475,000	1,379,900	711,033	14.00	74,338,927
1902	1,130,650	1,450,000	1,362,700	794,876	14.50	74,838,065
1903	1,170,000	875,000	1,480,500	296,461	14.60	77,207,898
1904	1,230,000	835,000	1,573,300	397,141	14.60	78,868,058
1905	1,270,000	595,000	1,809,100	384,424	15.40	80,904,476
1906	1,310,000	555,000	1,987,900	435,448	15.00	86,505,181
1907	1,360,000	785,000	2,059,700	504,805	15.00	92,378,624
1908	1,510,450	1,015,000	2,377,500	591,028	15.50	97,098,308
1909	1,614,800	2,095,000	3,230,300	714,592	14.80	107,875,780
1910	1,830,420	2,463,000	3,882,100	842,991	15.80	118,457,151
1911	2,039,381	2,443,000	4,107,900	968,067	16.50	127,249,343
1912	3,016,543	2,383,000	4,503,700	1,085,186	15.50	151,384,317
1913	3,400,279	2,359,000	5,626,500	1,017,128	15.80	169,743,933
1914	3,555,308	2,275,000	6,422,800	1,148,471	16.50	178,296,823
1915	3,807,803	2,191,000	6,759,600	1,246,389	18.20	188,941,408
1916	4,178,348	2,207,000	7,015,400	1,368,608	17.80	197,915,182
1917	4,318,797	2,118,000	6,514,200	974,956	17.80	195,145,782
1918	4,508,123	2,029,000	6,977,500	1,069,638	18.50	201,276,832
1919	5,149,064	1,940,000	8,035,500	1,164,773	21.20	206,541,957
1920	6,482,506	1,726,000	8,365,500	998,745	24.50	230,640,724
1921	7,238,027	1,637,000	9,079,000	955,826	25.80	241,698,336

Beginning with the year 1917 the total of Assessors' valuation was reduced by a portion of personal property being valued and taxed by the State.

Respectfully submitted,
ELIPHALET T. TIFFT, *City Treasurer.*

I hereby certify that I have examined, in detail, the foregoing abstracts from the accounts of the City Treasurer; that the receipts from various sources, as stated, are correct; that all expenditures are supported by warrants regularly approved by the proper officials, and that the condition of various accounts—including cash on hand and in banks—on November 30, 1921, has been verified by comparison with the records of this office.

CLIFFORD E. COOK, *City Auditor.*

SPRINGFIELD, MASS., December 31, 1921.

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CITY ORDINANCES FOR 1921

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CITY OF SPRINGFIELD.

ORDINANCES OF 1921

CHAPTER I.

AN ORDINANCE

LIMITING THE NUMBER OF ASSISTANT ASSESSORS.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. Section 1 of chapter 13 of the Revised Ordinances relating to Assessors and Assistant Assessors, as amended by chapter 3 of the ordinances of 1907, is hereby further amended by striking out the word "twelve" and substituting therefor the words "not to exceed thirty," so that said section as thus further amended shall read as follows:

SECTION 1. In the month of January, or within sixty days after the organization of the council in each year, there shall be elected by the city council, in joint convention, not to exceed thirty assistant assessors, who shall hold office for one year from the first day of April in the year of their election. They shall be resident citizens of Springfield, and shall severally receive for each day's service such sum as the city council shall, from time to time, by ordinance determine.

SECTION 2. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

Approved, January 24, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER II.

AN ORDINANCE

CREATING A CITY PLANNING BOARD.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. A city planning board to consist of the mayor, the chairman of the board of park commissioners and the chairman of the board of public works who shall be members thereof ex officio and of five other citizens of the city of Springfield who shall be appointed by the mayor subject to confirmation by the city council, is hereby created. As soon after the passage hereof as is practical, the mayor shall appoint

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five citizens as members of said board to hold office for the terms of one, two, three, four and five years respectively from the first day of April, nineteen hundred and twenty-one. Thereafter in the month of March in each year the mayor shall appoint a citizen as a member of said board, subject to confirmation by the city council, to hold office for five years from the first day of April therein. Vacancies occurring in the board shall be filled by appointment by the mayor, subject to confirmation by the city council, for any unexpired terms.

SECTION 2. The members of said board shall serve without pay. Said board may make rules for the conduct of its business, choose its officers and hold such hearings as it may deem proper and necessary. It may expend such sums of money for expert and clerical assistance and other purposes as the city council may from time to time authorize. It may require any officer, department, board or commission of the city to furnish it with such information, records, reports, plans, data and statistics within his or its knowledge as will aid said planning board in the performance of its duties.

SECTION 3. It shall be the duty of said board, so far as is not inconsistent with other laws or ordinances, to prepare or have prepared a comprehensive plan for the alteration, construction and development of the city's works and buildings, either in reference to the whole city or any section thereof, and in so doing it shall be guided by considerations of public safety, health, utility, convenience and beauty and the future needs of the city. In such plan it shall consider and recommend the location, use, nature and character of all public buildings to be hereafter altered or erected, concerning which the advice of said board may be sought, the improvement and development of playgrounds, the location, extent, width, grades, character, nature, decorations, tree plantings and uses of all streets, boulevards, open spaces, terraces, parks, squares, playgrounds, bridges, docks, waterways and all public works of like nature, the locations and privileges which may be granted to or exercised by corporations or individuals in the use by them of any streets, waterways, or property of the city or of spaces therein under its control or which it is bound to keep in repair, the establishment of such building lines as it may deem proper and the establishment of such zones as it may deem proper. It shall also plan and recommend in any other matter affecting the resources, possibilities or needs of the city whenever it may be requested so to do by the city council or either branch thereof, or when in the judgment of said board it may be wise and proper so to do.

SECTION 4. It shall further be the duty of said board to make careful studies of the resources, possibilities and needs of the city of Springfield

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with respect to conditions which may be injurious to public health, or otherwise injurious in and about rented dwellings, and to make plans for the development of the municipality with special reference to the proper housing of its people.

SECTION 5. Said board shall make and keep on file such reports, maps, plans, or models as shall illustrate its plans and recommendations. During the month of December in each year it shall make a report of its doings, plans and recommendations to the city council; and it may make a report of its plans and recommendations to the city council, or to either branch thereof at such other times as it may see fit or as it shall otherwise be required so to do.

SECTION 6. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

Approved, February 21, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER III.

AN ORDINANCE

RELATIVE TO THE POLICE DEPARTMENT.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. A joint standing committee of five members is hereby established and created to consist of the President of the Board of Aldermen and one other Alderman to be appointed by the Mayor, and the President of the Common Council and two other Councilmen to be appointed by said President of the Common Council, said committee to be known and referred to as the Police Committee. Said Committee shall hold office until their successors shall be duly elected or appointed. A vacancy in said Committee shall be filled, ex officio or by appointment, in the same manner as was designated or appointed the member whose place has become vacant.

SECTION 2. The Police Department of the City of Springfield shall hereafter be governed directly by the City Council of said City pursuant to the powers and in the exercise of the duties conferred and imposed upon said City Council by Chapter 244 of the Acts of 1909, or by any other Acts pertaining thereto; except that as to the powers herein expressly delegated to said Police Committee, the said Council shall act through said Committee.

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SECTION 3. The said Police Committee shall be responsible for, and shall have the charge and care of, all property belonging to the Police Department and shall properly maintain the same by necessary expenditures from the funds available for the use of said Department. The said Police Committee shall have the power to purchase and obtain property necessary for the department, and to dispose of or sell such of the Department's property as it may deem necessary, but no purchase, sale, or disposition of such property to an amount exceeding five hundred dollars at any one time or for any one purpose shall be made without authority of the City Council therefor. Moneys derived from the sale or disposition of property shall be paid forthwith to the City Treasurer. The Police Committee shall seasonably approve all bills, including pay rolls, lawfully contracted by the department, and certify them to the City Auditor.

SECTION 4. Subject to the limitations imposed by and the provisions of Section 5 of this Ordinance, the rules and regulations approved and adopted by the former Police Commission on October 2, 1916, with amendments thereof heretofore duly approved, adopted and promulgated, are adopted as and shall continue to be the lawful rules for the maintenance of the said police department, and for the regulation, government and discipline of all members and employees thereof until the adoption and promulgation of other Rules and Regulations by said City Council; provided, however, that wherever in said rules and regulations there occur the words "Police Commission" or "Board of Police Commissioners" or words designating or referring to said bodies or either of them, there shall be substituted therefor and read in place thereof the words "Police Committee," designating and referring to the Police Committee established by this Ordinance.

SECTION 5. The Police Committee of the City Council shall have no power to appoint or to impose or enforce disciplinary measures of any kind or nature upon, or with respect to, the chief or any of the other members of the said Police Department; but upon presentation to said Committee of duly signed complaints or charges in writing against any members of the Police Department, said Police Committee shall order a hearing thereon, subject to the provisions of General Laws, Chapter 31, Sections 26, 44 and 45, so far as applicable thereto, and the rules and regulations hereby established for the government of the said Police Department in Section 4 of this Ordinance and shall hold such hearing forthwith and shall report the result of said hearing, with so much of the evidence taken thereat, if any, as shall to them seem necessary, with their recommendations thereon, to the City Council for final action

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upon and in regard to said complaints or charges in the manner provided by law.

SECTION 6. Sections 1, 2 and 3 of Chapter 9 of the Ordinances of the year 1917, and all other ordinances or parts of ordinances inconsistent herewith are hereby repealed.

Approved, March 28, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER IV.

AN ORDINANCE

RELATING TO THE SALE OF CERTAIN LANDS OWNED BY THE CITY.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. The City Realty Committee are hereby authorized and empowered in their discretion to negotiate sales of any and all parcels of land now owned or hereafter acquired by the City and not devoted or adapted to any public use.

SECTION 2. The Mayor is hereby authorized and empowered in the name and on behalf of the City to execute quitclaim deed of any such parcel or parcels of land upon the recommendation of the City Realty Committee, and for the prices that may be named by them.

SECTION 3. The proceeds of all such sales of land shall be paid to the City Treasurer.

Approved, April 4, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER V.

AN ORDINANCE

PROVIDING FOR THE APPOINTMENT OF MEASURERS OF LUMBER.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. In compliance with section 7 of chapter 96 of the General Laws, there shall, on or before the first day of April in each year, be appointed by the mayor, with the approval of the board of aldermen, one or more measurers of lumber who shall continue in office for one year ending April first and until their successors are appointed and qualified.

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SECTION 2. Before entering upon the duties of their office they shall be sworn to the faithful performance thereof.

Approved, April 11, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER VI.

AN ORDINANCE

RELATING TO THE POLICE DEPARTMENT.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. RESIGNATIONS. The Police Committee is hereby authorized and empowered to receive, act upon and, in its discretion, accept or decline to accept the resignation in writing, signed and duly tendered, of any member of the Police Department.

SECTION 2. SUSPENSIONS. The Police Committee is hereby authorized and empowered to suspend from duty any member of the Police Department against whom charges in writing signed by the person making the complaint shall have been preferred or submitted to it; provided, however, that the reasons for such suspension shall be specifically given in writing by said Police Committee to the person so suspended within twenty-four hours after such suspension.

SECTION 3. PROVISIONAL APPOINTMENTS. The Police Committee is hereby authorized and empowered to make provisional appointments to any position or office in the Police Department in which a vacancy exists and which may lawfully be so filled.

SECTION 4. TEMPORARY APPOINTMENTS. The Police Committee is hereby authorized and empowered to make temporary appointments to any position or office in the Police Department in which a vacancy exists and which may lawfully be so filled.

SECTION 5. EMERGENCY APPOINTMENTS. The Police Committee is hereby authorized and empowered to make emergency appointments to any position or office in the Police Department in which a vacancy exists and which may lawfully be so filled.

SECTION 6. NON-COMPETITIVE APPOINTMENTS. The Police Committee is hereby authorized and empowered to make appointments upon non-competitive examination to any position or office in the Police Department in which a vacancy exists and which may lawfully be so filled.

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SECTION 7. PROBATIONARY APPOINTMENTS. The Police Committee is hereby authorized and empowered to make appointments for a probationary period to any position or office in the Police Department in which a vacancy exists and which may lawfully be so filled.

SECTION 8. ACTING DESIGNATIONS. The Police Committee is hereby authorized and empowered to designate any member of the Police Department to perform the duties and exercise the powers of a grade or rank higher than that to which he belongs, in which a vacancy exists, for such period only as such vacancy shall not be otherwise lawfully filled. Any person so designated shall be given and shall use the title of the higher grade or rank with the word "Acting" prefixed thereto; and during such designation shall receive only the pay and emoluments of his regular grade or rank.

SECTION 9. SEPARABILITY. If any section or part of this ordinance shall be found invalid for any reason, the validity of the remaining sections or parts of this ordinance shall not be affected thereby.

SECTION 10. DEFINITIONS. (a) The words "Police Committee" as herein used shall be understood and taken to designate and refer to the joint standing committee of five members of the City Council established and created under that name by Chapter 3 of the ordinances of 1921 approved March 28, 1921. (b) The words "Police Department" as herein used shall be understood and taken to designate and refer to the Police Department of the City of Springfield. (c) The word "lawfully" as herein used shall be understood and taken to refer to the provisions of Chapter 31 of the General Laws, relating to the Civil Service, and to any other provisions of law applicable to the foregoing sections, respectively.

Approved, April 18, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER VII.

AN ORDINANCE

RELATING TO SIGNS AND OTHER PROJECTIONS IN PUBLIC WAYS.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 6 of Chapter 2 of the Ordinances of 1916 is hereby repealed and said Ordinance is amended by adding thereto Sections 6 and 7 so that said Ordinance as amended shall read as follows:

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SECTION 6. Provided, however, that the provisions of this Ordinance shall not be so construed as to compel the alteration or removal of any sign, advertising device, clock, marquee, permanent awning or other like structure erected prior to April 10th, 1916, before April 10, 1924.

SECTION 7. All Ordinances and parts of Ordinances inconsistent herewith are hereby repealed.

Approved, April 25, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER VIII.

AN ORDINANCE

ESTABLISHING A FEE FOR LICENSES FOR LODGING HOUSES.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. The fee to be charged for a license for a lodging house, in pursuance of chapter 59 of the General Acts of 1921, is hereby established at two dollars.

SECTION 2. No such license shall issue until the applicant therefor shall have paid said fee of two dollars to the city collector.

Section 3. All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

Approved, June 27, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER IX.

AN ORDINANCE

ACCEPTING SECTIONS 80 AND 81 OF CHAPTER 32 OF THE GENERAL LAWS.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. Sections 80 and 81 of Chapter 32 of the General Laws are hereby accepted and adopted as follows:

> Section 80. In cities, except Boston, which accept this and the following section or have accepted corresponding provisions of earlier laws by vote of the city council, the fire commissioner in cities having such an official, otherwise the aldermen, in all cases with the approval of the mayor, shall retire from active service and place upon the pension roll any fireman, call fireman or substitute call fireman of the city whom the city physician certifies in writing to be permanently disabled, mentally or physically, by injuries sustained or illness incurred through no

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fault of his own in the actual performance of duty, from further performing duty as such member; or any permanent member of said department who has performed faithful service therein for not less than twenty-five years if in the judgment of said board or official such member is disabled for useful service in the department; provided, that any permanent member of said department who has performed faithful service therein for twenty-five years and has attained the age of sixty shall be retired at his request.

Section 81. Any permanent member of a fire department retired under the preceding section shall receive an annual pension, payable monthly, equal to one-half of the annual salary or other compensation payable to him during the last year of his service. The pension of any call or substitute call fireman retired under said section shall be the same as that of a permanent member of the first grade of the same department in which he served, or if there be no grades, his compensation shall be that of a permanent member of the department performing duties like those which he performed.

Approved, September 20, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER X.

AN ORDINANCE

AMENDING CHAPTER 37 OF THE REVISED ORDINANCES RELATIVE TO THE PREVENTION OF INJURIOUS PRACTICES IN THE STREETS.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. Section 13 of Chapter 37 of the Revised Ordinances is hereby amended by striking out therefrom all words after the words "apply to" and inserting in place thereof the following words: "baby carriages and go-carts, or to any of the small carts, kiddy cars, tricycles, so-called 'Irish mails,' scooters, roller skates or other similar means of amusement and exercise operated by hand or foot and in common use by young children and provided further, that the use of said things for play purposes upon the sidewalks shall be limited to children under twelve years of age; and provided further, that none of said things shall be used for the purpose of coasting down inclined sidewalks in thickly populated parts of the city," so that said section as amended shall read as follows:

SECTION 13. No person shall drive, wheel, draw, or push any cart, wheelbarrow, or other vehicle of burden or of pleasure, upon or along any sidewalk in the city, except for the purpose of crossing such side-

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walk to go to or out of some adjoining inclosure; provided, this section shall not apply to baby carriages and go-carts, or to any of the small carts, kiddy cars, tricycles, so-called "Irish mails," scooters, roller skates or other similar means of amusement or exercise operated by hand or foot and in common use by young children and provided further, that the use of said things for play purposes upon the sidewalks shall be limited to children under twelve years of age; and provided further, that none of said things shall be used for the purpose of coasting down inclined sidewalks in thickly populated parts of the city.

Approved, October 3, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER XI.

AN ORDINANCE

Relative to Locations of Signs.

Be it ordained by the City Council of the City of Springfield, as follows:—

Section 1. A board on signs, to consist of three persons, is hereby established. Said board shall consist of the chairman of the board of park commissioners, the building commissioner, and a member of the city planning board to be designated by the chairman thereof.

Section 2. The said board shall approve or disapprove each notice received by the city from the division of highways, department of public works, relative to an application for the location of a sign, and shall forthwith notify the said division of highways of each such disapproval.

Approved, October 31, 1921.

Attest: E. A. NEWELL, *City Clerk.*

CHAPTER XII.

AN ORDINANCE

Establishing Certain Building Districts.

Be it ordained by the City Council of the City of Springfield, as follows:—

Section 1. The City of Springfield is hereby divided into zones or districts to be known respectively as Residence Districts and Non-residence Districts, as follows:

Non-residence Districts shall comprise (1) all lands which at the time this ordinance goes into effect are used for any business or industry other than farming, truck gardening, the growing of trees, shrubs, vines

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or plants, the raising of animals, and the conduct of a boarding or lodging house, and (2) all lands located and fronting upon any section of any street which lies between the outer lines of two successive intersecting streets and in which not less than one-half of the ground floor frontage on each side of said street is at said time devoted to business or industry or is manifestly intended to be so used.

Residence Districts shall comprise all areas not included in Non-residence Districts.

SECTION 2. Except as hereinafter provided no parcel of land lying in a Residence District and not at said time devoted to any business or industry, other than those specified in section one, shall hereafter be used therefor, and no permit shall be issued for the erection, alteration or conversion of any building for or to such use upon any such parcel.

SECTION 3. A permit may be issued for the erection in a Residence District of a building for the purposes of any business or industry, or for the alteration or conversion of a building in such district for or to such purposes, provided that there be filed with the application for such permit written consents thereto signed and acknowledged by the owners or legal representatives of the owners of not less than three-fourths of all lands used for other than business or industrial purposes which front on the same side of the street and which lie between the two intersecting streets nearest to and on either side of the land in question or within four hundred feet on either side thereof in case the nearest intersecting street is more than that distance therefrom, and also of all lands fronting upon the other side of the street and directly opposite said land, and of all lands immediately in the rear thereof; and provided further that the City Council shall after public hearing so order.

SECTION 4. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

Approved, December 8, 1921.

Attest: CLIFFORD F. SMITH, *Assistant City Clerk.*

CHAPTER XIII.

AN ORDINANCE

CREATING A POLICE TRAINING SCHOOL.

Be it ordained by the City Council of the City of Springfield, as follows:—

SECTION 1. A police training school is hereby created and established for the training and instruction of all reserve police officers and of any regular police officers who may be found to require it.

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SECTION 2. Said school shall provide a thorough course of training and instruction in the laws and the manner of their enforcement, the powers and duties of a police officer, personal hygiene and physical development, the art of self-defense, the art of handling resisting prisoners with the least necessary application of force and the least possible injury to the prisoner, the art of accurate snap shooting with the revolver, pistol and riot-gun, and the proper deportment and conduct of a police officer.

SECTION 3. No person shall be appointed a regular police officer until he shall have satisfactorily mastered said course, and any regular police officer shall take said course or any part or parts thereof whenever the police committee or other authority in control of the police department shall deem it desirable.

SECTION 4. Said school shall be instituted and maintained by the police committee or by such other body or officer as may hereafter be invested with the supervision and control of the police department.

Approved, December 14, 1921.

Attest: CLIFFORD F. SMITH, *Assistant City Clerk.*

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TAXES

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TAXES.

TAXES—1905—WILLIAM H. C. AUGUR, COLLECTOR

Amount of State tax committed,	$98,960.00	
Amount of County tax committed,	74,932.77	
Amount of Bank tax committed,	39,209.52	
Amount of City tax committed,	1,109,312.49	
Amount of Military Armory tax committed,	6,728.38	
Amount of Grade Crossing tax committed,	1,177.05	
Amount of Excise tax Springfield Street Railway committed,	12,132.36—	$1,342,452.47
Received of Collector as follows:—		
State tax,	$98,960.00	
County tax,	74,932.77	
Bank tax,	39,209.52	
On account of City tax,	1,096,511.34	
Military Armory tax,	6,728.38	
Grade Crossing tax,	1,177.05	
Excise tax Springfield Street Railway,	12,132.26	
Abatements,	12,801.15—	$1,342,452.47

Rate—Fifteen dollars and forty cents on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

TAXES—1906—CHARLES A. FRAZER, COLLECTOR.

Amount of State tax committed,	$86,590.00
Amount of County tax committed,	89,968.08
Amount of Bank tax committed,	26,876.53
Amount carried forward,	$203,434.61

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Amount brought forward,	$203,434.61	
Amount of City tax committed,	1,157,038.64	
Amount of Military Armory tax committed,	6,611.06	
Amount of Grade Crossing tax committed,	1,111.66	
Amount of Excise tax Springfield Street Railway committed,	12,856.06	
Amount of Special Census tax committed,	820.78—	$1,381,872.81
Received of Collector as follows:—		
State tax,	$86,590.00	
County tax,	89,968.08	
Bank tax,	26,876.53	
On account of City tax,	1,145,794.34	
Military Armory tax,	6,611.06	
Grade Crossing tax,	1,111.66	
Excise tax Springfield Street Railway,	12,856.06	
Special Census,	820.78	
Abatements,	11,244.30—	$1,381,872.81

Rate—Fifteen dollars on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

TAXES—1907—CHARLES A. FRAZER, COLLECTOR.

Amount of State tax committed,	$103,280.00	
Amount of County tax committed,	92,566.11	
Amount of Bank tax committed,	26,073.69	
Amount of City tax committed,	1,230,789.52	
Amount of Military Armory tax committed,	6,430.43	
Amount of Excise tax Springfield Street Railway committed,	13,646.75—	$1,472,786.50
Received of Collector as follows:—		
State tax,	$103,280.00	
County tax,	92,566.11	
Bank tax,	26,073.69	
On account of City tax,	1,220,963.31	
Military Armory tax,	6,430.43	
Excise tax Springfield Street Railway,	13,646.75	
Abatements,	9,826.21—	$1,472,786.25

Rate—Fifteen dollars on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

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TAXES—1908—CHARLES A. FRAZER, COLLECTOR.

Amount of State tax committed,	$142,010.00	
Amount of County tax committed,	92,465.60	
Amount of Bank tax committed,	26,346.46	
Amount of City tax committed,	1,326,257.02	
Amount of Military Armory tax committed,	922.50	
Amount of Excise tax Springfield Street Railway committed,	13,608.62	
Amount for abating nuisance Kibbe Hollow tax committed,	785.76—	$1,602,395 96
Received of Collector as follows:—		
State tax,	$142,010.00	
County tax,	92,465.60	
Bank tax,	26,346.46	
On account of City tax,	1,313,145.20	
Military Armory tax,	922.50	
Excise tax Springfield Street Railway,	13,608.62	
Abatements,	13,463.23	
On account of abating nuisance Kibbe Hollow,	434.35—	$1,602,395.96

Rate—Fifteen dollars and fifty cents on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

TAXES—1909—CHARLES A. FRAZER, COLLECTOR.

Amount of State tax committed,	$116,190.00	
Amount of County tax committed,	92,465.60	
Amount of Bank tax committed,	25,127.59	
Amount of City tax committed,	1,442,009.18	
Amount of Excise tax Springfield Street Railway committed,	14,214.26	
Amount for abating nuisance Kibbe Hollow tax committed,	785.76—	$1,690,792.39
Received of Collector as follows:—		
State tax,	$116,190.00	
County tax,	92,465.60	
Bank tax,	25,127.59	
On account of City tax,	1,426,950.22	
Amount carried forward,	$1,660,733.41	

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Amount brought forward,	$1,660,733.41	
Excise tax Springfield Street Railway,	14,214.26	
Abatements,	15,349.67	
Abatement on account of abating nuisance Kibbe Hollow,	495.05—	$1,690,792.39

Rate—Fourteen dollars and eighty cents on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

TAXES—1910—CHARLES A. FRAZER, COLLECTOR.

Amount of State tax committed,	$158,345.00	
Amount of County tax committed,	95,413.62	
Amount of Bank tax committed,	29,595.64	
Amount of City tax committed,	1,685,106.13	
Amount of Excise tax Springfield Street Railway committed,	14,671.37—	$1,983,131.76
Received of Collector as follows:—		
State tax,	$158,345.00	
County tax,	95,413.62	
Bank tax,	29,595.64	
On account of City tax,	1,665,597.37	
Excise tax Springfield Street Railway,	14,671.37	
Abatements,	19,508.76—	$1,983,131.76

Rate—Fifteen dollars and eighty cents on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

TAXES—1911—CHARLES A. FRAZER, COLLECTOR.

Amount of State tax committed,	$158,345.00	
Amount of County tax committed,	107,858.85	
Amount of Bank tax committed,	33,125.83	
Amount of City tax committed,	1,907,444.59	
Amount of Excise tax Springfield Street Railway committed,	13,441.88—	$2,220,216.15

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Received of Collector as follows:—

State tax,	$158,345.00	
County tax,	107,858.85	
Bank tax,	33,125.83	
On account of City tax,	1,892,321.38	
Excise tax Springfield Street Railway,	13,441.88	
Abatements,	15,123.21—	$2,220,216.15

Rate—Sixteen dollars and fifty cents on one thousand dollars. Poll tax, two dollars.

Attest, ELIPHALET T. TIFFT, *City Treasurer.*

TAXES—1912—CHARLES A. FRAZER, Collector.

Amount of State tax committed,	$182,027.18	
	$179,937.50	
State System of accounts,	2,089.68	
Amount of County tax committed,	105,266.09	
Amount of Bank tax committed,	28,134.82	
Amount of City tax committed,	2,130,292.54	
Amount of Excise tax Springfield Street Railway committed,	14,584.19—	$2,460,304.82

Received of Collector as follows:—

State tax,	$182,027.18	
County tax,	105,266.09	
Bank tax,	28,134.82	
On account of City tax,	2,103,191.75	
Excise tax Springfield Street Railway,	14,584.19	
Abatements,	27,100.79—	$2,460,304.82

Rate—Fifteen dollars and fifty cents on one thousand dollars. Poll tax, two dollars.

Attest, WILLIAM C. MARSH, *City Auditor.*

TAXES—1913—CHARLES A. FRAZER, Collector.

Amount of State tax committed,	$255,920.00	
Amount of County tax committed,	116,422.70	
Amount of Bank tax committed,	25,108.66	
Amount of City tax committed,	2,383,606.98	
Amount of Excise tax Springfield Street Railway committed,	16,446.00—	$2,797,504.34

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Received of Collector as follows:—

State tax,	$255,920.00	
County tax,	116,422.70	
Bank tax,	25,108.66	
Excise tax Springfield Street Railway,	16,446.00	
On account of City tax,	2,354,763.81	
Abatements,	28,843.17—	$2,797,504.34

Rate—Fifteen dollars and eighty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

TAXES—1914—CHARLES A. FRAZER, Collector.

Amount of State tax committed,	$279,912.50	
Amount of County tax committed,	115,373.85	
Amount of Bank tax committed,	26,846.80	
Amount of Excise tax Springfield Street Railway committed,	16,673.85	
Amount of City tax committed,	2,659,381.98—	$3,098,188.98

Received of Collector as follows:—

State tax,	$279,912.50	
County tax,	115,373.85	
Bank tax,	26,846.80	
Excise tax Springfield Street Railway,	16,673.85	
On account of City tax,	2,624,423.81	
Abatements,	34,958.17—	$3,098,188.98

Rate—Sixteen dollars and fifty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

TAXES—1915—CHARLES A. FRAZER, Collector.

Amount of State tax committed,	$311,902.50	
Amount of County tax committed,	123,240.23	
Amount of Bank tax committed,	23,673.83	
Amount of Excise tax Springfield Street Railway committed,	16,494.16	
Amount of City tax committed,	3,093,478.76—	$3,568,789.48

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Received of Collector as follows:—

State tax,	$311,902.50	
County tax,	123,240.23	
Bank tax,	23,673.83	
Excise tax Springfield Street Railway,	16,494.16	
On account of City tax,	3,057,450.22	
Abatements,	36,028.54—	$3,568,789.48

Rate—Eighteen dollars and twenty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

TAXES—1916—CHARLES A. FRAZER, Collector.

Amount of State tax committed,	$296,240.00	
Amount of County tax committed,	150,706.77	
Amount of Bank tax committed,	18,131.04	
Amount of Excise tax Springfield Street Railway committed,	17,999.27	
Amount of City tax committed,	3,214,155.45—	$3,697,232.53

Received of Collector as follows:—

State tax,	$296,240.00	
County tax,	150,706.77	
Bank tax,	18,131.04	
Excise tax Springfield Street Railway,	17,999.27	
On account of City tax,	3,131,536.95	
Abatements,	82,618.50—	$3,697,232.53

Rate—Seventeen dollars and eighty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

TAXES—1917—CHARLES A. FRAZER, Collector.

Committed to City Collector:—

For State Tax,	$409,750.00	
" County tax,	176,227.17	
" Bank tax,	17,321.89	
" Excise tax Springfield Street Railway Company,	19,426.53	
" City tax,	2,984,841.32—	$3,607,566.91

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Accounted for as follows:—

Received by City Collector,	$3,575,105.93	
Abated by Board of Assessors,	32,460.98—	$3,607,566.91

Rate—Seventeen dollars and eighty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

TAXES—1918—CHARLES A. FRAZER, COLLECTOR.

Committed to City Collector:—

For State tax,	$409,750.00	
" County tax,	183,386.40	
" Bank tax,	18,864.47	
" Excise tax Springfield Street Railway Company,	20,185.84	
" City tax,	3,216,177.59—	$3,848,364.30

Accounted for as follows:—

Received by City Collector,	$3,822,287.56	
Abated by Board of Assessors,	26,076.74—	$3,848,364.30

Rate—Eighteen dollars and fifty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

TAXES—1919—CHARLES A. FRAZER, COLLECTOR.

Committed to City Collector:—

For State tax,	$476,660.80	
" County tax,	185,963.20	
" Bank tax,	21,748.41	
" Excise tax Springfield Street Railway Company,	15,196.98	
" City tax,	3,806,914.69—	$4,506,484.08

Accounted for as follows:—

Received by City Collector,	$4,471,374.83	
Abated by Board of Assessors,	35,109.25—	$4,506,484.08

Rate—Twenty-one dollars and twenty cents on one thousand dollars. Poll tax, two dollars.

Attest, WM. G. McINTYRE, *City Auditor.*

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TAXES—1920—CHARLES A. FRAZER, Collector.

Committed to City Collector:—

For State tax,	$599,300.80	
" County tax,	207,216.10	
" National Bank tax,	31,054.61	
" City tax,	4,946,175.42	
" Civilian War Poll tax,	106,599.00—	$5,890,345.93

Accounted for as follows:—

Received by City Collector,	$5,806,147.00	
Abated by Board of Assessors,	83,371.52	
Amount Uncollected,	827.41—	$5,890,345.93

Rate—Twenty-four dollars and fifty cents on one thousand dollars. Poll tax, five dollars.

Attest, CLIFFORD E. COOK, *City Auditor.*

TAXES—1921—CHARLES A. FRAZER, Collector.

Committed to City Collector:—

For State tax,	$599,300.80	
" County tax,	207,216.10	
" National Bank tax,	46,117.09	
" City tax,	5,501,582.17	
" Civilian War Poll tax,	107,646.00—	$6,461,862.16

Accounted for as follows:—

Received by City Collector,	$4,620,341.93	
Abated by Board of Assessors,	53,704.38	
Amount Uncollected,	1,787,815.85—	$6,461,862.16

Rate—Twenty-five dollars and eighty cents on one thousand dollars. Poll tax, five dollars.

Attest, CLIFFORD E. COOK, *City Auditor.*

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ASSESSORS' VALUATION OF PROPERTY.

1852—Total valuation,		$5,180,210 00
1853—Total valuation,		5,509,660 00
1854—Total valuation,		7,762,250 00
1855—Total valuation,		8,409,870 00
1856—Total valuation,		8,284,060 00
1857—Total valuation,		8,558,720 00
1858—Real estate,	$5,702,040 00	
Personal estate,	2,679,100 00	8,381,140 00
1859—Real estate,	5,794,590 00	
Personal estate,	2,845,640 00	8,640,230 00
1860—Real estate,	5,962,480 00	
Personal estate,	2,955,800 00	8,918,280 00
1861—Real estate,	6,417,660 00	
Personal estate,	3,067,920 00	9,485,580 00
1862—Real estate,	6,719,500 00	
Personal estate,	3,039,390 00	9,758,890 00
1863—Real estate,	7,211,320 00	
Personal estate,	3,744,790 00	10,956,110 00
1864—Real estate,	8,536,490 00	
Personal estate,	2,871,430 00	11,407,920 00
1865—Real estate,	9,007,850 00	
Personal estate,	3,784,910 00	12,792,760 00
1866—Real estate,	10,241,540 00	
Personal estate,	4,755,480 00	14,997,020 00
1867—Real estate,	12,758,420 00	
Personal estate,	5,110,810 00	17,869,230 00
1868—Real estate,	15,125,520 00	
Personal estate,	5,322,640 00	20,448,160 00
1869—Real estate,	17,665,610 00	
Personal estate,	5,901,570 00	23,567,180 00
1870—Real estate,	18,443,990 00	
Personal estate,	6,070,070 00	24,514,060 00
1871—Real estate,	20,962,100 00	
Personal estate,	6,589,870 00	27,551,970 00

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1872—Real estate,	$26,098,920 00	
Personal estate,	7,512,230 00	$33,611,150 00
1873—Real estate,	29,380,520 00	
Personal estate,	8,060,300 00	37,440,820 00
1874—Real estate,	30,489,850 00	
Personal estate,	7,846,928 00	38,336,778 00
1875—Real estate,	31,125,660 00	
Personal estate,	8,398,912 40	39,524,572 40
1876—Real estate,	27,647,560 00	
Personal estate,	7,461,896 86	35,109,456 86
1877—Real estate,	23,737,000 00	
Personal estate,	6,955,776 66	30,692,776 66
1878—Real estate,	22,746,330 00	
Personal estate,	6,637,845 72	29,384,175 72
1879—Real estate,	22,211,230 00	
Personal estate,	7,230,094 00	29,441,324 00
1880—Real estate,	22,856,020 00	
Personal estate,	8,292,655 00	31,148,675 00
1881—Real estate,	23,795,920 00	
Personal estate,	8,935,850 00	32,731,770 00
1882—Real estate,	25,084,420 00	
Personal estate,	9,198,258 00	34,282,678 00
1883—Real estate,	25,676,800 00	
Personal estate,	9,260,459 00	34,937,259 00
1884—Real estate,	26,301,150 00	
Personal estate,	8,792,666 00	35,093,816 00
1885—Real estate,	26,969,800 00	
Personal estate,	8,865,928 00	35,835,728 00
1886—Real estate,	27,638,760 00	
Personal estate,	9,143,442 00	36,782,202 00
1887—Real estate,	28,566,280 00	
Personal estate,	9,416,384 17	37,982,664 17
1888—Real estate,	30,323,140 00	
Personal estate,	9,540,115 14	39,863,255 14
1889—Real estate,	32,000,680 00	
Personal estate,	10,072,895 00	42,073,575 00
1890—Real estate,	33,795,860 00	
Personal estate,	10,697,773 00	44,493,633 00
1891—Real estate,	37,219,490 00	
Personal estate,	11,110,144 00	48,329,634 00

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1892—Real estate,	$39,444,580 00	
Personal estate,	11,336,407 00	$50,780,987 00
1893—Real estate,	42,975,820 00	
Personal estate,	12,264,099 00	55,239,919 00
1894—Real estate,	44,083,900 00	
Personal estate,	12,365,525 00	56,449,425 00
1895—Real estate,	46,063,460 00	
Personal estate,	12,969,681 00	59,033,141 00
1896—Real estate,	48,344,280 00	
Personal estate,	13,071,811 00	61,416,091 00
1897—Real estate,	50,344,460 00	
Personal estate,	14,553,919 00	64,898,379 00
1898—Real estate,	52,022,570 00	
Personal estate,	13,677,143 00	65,699,713 00
1899—Real estate,	53,400,770 00	
Personal estate,	16,469,077 00	69,869,847 00
1900—Real estate,	55,676,320 00	
Personal estate,	16,682,161 00	72,358,481 00
1901—Real estate,	57,394,710 00	
Personal estate,	16,944,217 00	74,338,927 00
1902—Real estate,	58,411,160 00	
Personal estate,	16,424,905 40	74,836,065 40
1903—Real estate,	60,787,130 00	
Personal estate,	16,420,768 80	77,207,898 80
1904—Real estate,	62,145,950 00	
Personal estate,	16,722,107 80	78,868,057 80
1905—Real estate,	63,273,330 00	
Personal estate,	17,631,146 80	80,904,476 80
1906—Real estate,	68,239,990 00	
Personal estate,	18,265,191 00	86,505,181 00
1907—Real estate,	73,319,860 00	
Personal estate,	19,058,764 00	92,378,624 00
1908—Real estate,	76,965,520 00	
Personal estate,	20,132,788 00	97,098,308 00
1909—Real estate,	85,403,490 00	
Personal estate,	22,472,290 00	107,875,780 00
1910—Real estate,	94,984,660 00	
Personal estate,	24,097,118 00	119,081,778 00

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1911—Real estate,	$102,393,230 00	
Personal estate,	25,659,804 00	$128,053,034 00
1912—Real estate	123,602,570 00	
Personal estate	25,927,780 00	149,530,350 00
1913—Real estate,	139,348,180 00	
Personal estate,	31,326,534 00	170,674,714 00
1914—Real estate,	147,180,360 00	
Personal estate,	32,948,691 00	180,129,051 00
1915—Real estate,	155,949,860 00	
Personal estate,	33,594,430 00	189,544,290 00
1916—Real estate,	162,945,320 00	
Personal estate,	39,004,692 00	201,950,012 00
1917—Real estate,	171,248,770 00	
Personal estate,	25,185,190 00	196,433,960 00
1918—Real estate,	175,128,240 00	
Personal estate,	26,771,589 00	201,899,829 00
1919—Real estate,	180,662,760 00	
Personal estate,	27,334,620 00	207,997,380 00
1920—Real estate,	202,544,420 00	
Personal estate,	28,725,210 00	231,269,630 00
1921—Real estate,	207,780,450 00	
Personal estate,	33,095,130 00	240,875,580 00

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CITY OFFICERS

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CITY OFFICERS

CITY OFFICERS FOR 1852.

MAYOR—CALEB RICE.

ALDERMEN—Ward One, Samuel S. Day; Ward Two, Eliphalet Trask; Ward Three, E. D. Beach; Ward Four, George Dwight; Ward Five, Albert Morgan; Ward Six, Charles G. Rice; Ward Seven, Oliver B. Bannon; Ward Eight, F. A. Barton.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, Henry Morris; Ward One, J. B. M. Stebbins, Eleazer Ripley, John V. Jones; Ward Two, W. C. Sturtevant, Francis Bates, Henry Fuller, Jr.; Ward Three, Charles Merriam, Willis Phelps, Cicero Simons; Ward Four, Henry Morris, Alexander H. Avery, Benjamin F. Warner; Ward Five, William Hitchcock, Hiram Q. Sanderson, Nathaniel Cate; Ward Six, Henry Adams; Ward Seven, Ezra Kimberly; Ward Eight, Rodney Holt.

CLERK—Alanson Hawley.

CITY CLERK AND TREASURER—Joseph Ingraham.

CITY OFFICERS FOR 1853.

MAYOR—CALEB RICE.

ALDERMEN—Ward One, John B. Stebbins; Ward Two, Eliphalet Trask; Ward Three, Willis Phelps; Ward Four, Henry Vose; Ward Five, Titus Amadon; Ward Six, Drayton Perkins; Ward Seven, Joseph N. Sollace; Ward Eight, Harvey Foster.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, Henry Morris (resigned May 16). William Stowe; Ward One, Daniel Hitchcock, William Pynchon, Addison Day; Ward Two, Joseph C. Pynchon, Orrin Baker, E. W. Bond; Ward Three, Lombard Dale, T. M. Walker, William Stowe; Ward Four, Henry Morris, Alexander H. Avery, Edmund Palmer; Ward Five, Nathaniel Cate, William Dickinson, Daniel Collins; Ward Six, Henry Adams; Ward Seven, Ezra Kimberly; Ward Eight, William S. Barker.

CLERK—Alanson Hawley (resigned March 7), Samuel O. Gay.

CITY CLERK AND TREASURER—Joseph Ingraham.

CITY OFFICERS FOR 1854.

MAYOR—PHILOS B. TYLER.

ALDERMEN—Ward One, Wilson Eddy; Ward Two, Eliphalet Trask; Ward Three, Elkanah Barton; Ward Four, William L. Washburn; Ward Five, Edward F. Moseley; Ward Six, Roderick Lombard; Ward Seven, Joseph Lombard; Ward Eight, Rodney Holt.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, Samuel S. Day; Ward One, Asa Clark, Samuel S. Day, Thomas W. Wason; Ward Two, George H. Roberts, Henry A. Robinson, Roderick Ashley; Ward Three, Philo F. Wilcox, Lombard Dale, Frederick H. Harris; Ward Four, Daniel L. Harris, Tilly Haynes, Joseph B. Hopkins; Ward Five, Daniel Collins, G. W. Harrison, A. H. Clark; Ward Six, Edwin S. Hall; Ward Seven, Harris B. Johnson; Ward Eight, Horace Pease.

CLERK—Charles O. Chapin.

CITY CLERK AND TREASURER—Joseph Ingraham.

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CITY OFFICERS FOR 1855.

MAYOR—ELIPHALET TRASK.

ALDERMEN—Ward One, James M. Blanchard; Ward Two, W. C. Sturtevant; Ward Three, David Smith; Ward Four, Daniel Reynolds; Ward Five, William E. Montague; Ward Six, Henry Adams; Ward Seven, James P. Chapman; Ward Eight, Harvey Foster.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, John M. Stebbins; Ward One, E. B. Haskell, John M. Stebbins, Stephen Morse; Ward Two, O. W. Wilcox, John Hooker, 3d, D. H. Brigham; Ward Three, Francis S. Graves, Rufus Elmer, E. W. Dickinson; Ward Four, Abel B. Howe, John W. Hunt, Jeremiah R. Cadwell; Ward Five, Nathaniel Howard, S. S. Holmes, E. F. Moseley; Ward Six, J. G. Capron; Ward Seven, Luther S. Lewis; Ward Eight, Samuel Webber.

CLERK—Thomas Chubbuck.

CITY CLERK AND TREASURER—Joseph Ingraham.

CITY OFFICERS FOR 1856.

MAYOR—ANSEL PHELPS, JR.

ALDERMEN—Ward One, Samuel S. Day; Ward Two, Henry Fuller, Jr. Ward Three, Edmund Freeman; Ward Four, Stephen C. Bemis; Ward Five, Thomas H. Allen; Ward Six, Henry Alexander, Jr.; Ward Seven, Henry Reynolds; Ward Eight, Samuel Webber.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, James Kirkman; Ward One, Charles O. Russell, Chauncey L. Covell, Hervey Hills; Ward Two, O. W. Wilcox, Henry A. Chapin, Dexter H. Brigham; Ward Three, Dr. Nathan Adams, Charles L. Shaw, George Whitney; Ward Four, James Kirkham, George Walker, John W. Hunt; Ward Five, Otis A. Seamans, E. F. Moseley, Nelson Tyler; Ward Six, Elbridge Barton; Ward Seven, William Smith; Ward Eight, Milton Foster.

CLERK—Charles O. Chapin.

CITY CLERK AND TREASURER—Joseph Ingraham.

CITY OFFICERS FOR 1857.

MAYOR—ANSEL PHELPS, JR.

ALDERMEN—Ward One, Samuel S. Day; Ward Two, Henry Fuller, Jr.; Ward Three, Henry Alexander, Jr.; Ward Four, Stephen C. Bemis; Ward Five, Joseph Hannis; Ward Six, James Warner; Ward Seven, Henry Pomroy; Ward Eight, Samuel Webber, Jr.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, George Walker; Ward One, Charles O. Russell, Chauncey L. Covell, James Stebbins; Ward Two, Erastus Hayes, Lyman King, Francis B. Bacon; Ward Three, Marvin Lincoln, Henry Avery, John R. Hixon; Ward Four, George Walker, Samuel Leonard, William Birnie; Ward Five, Charles Woodman, Luther Upton, George A. Otis; Ward Six, Elbridge Barton; Ward Seven, William Smith; Ward Eight, George A. Cooley.

CLERK—Charles O. Chapin.

CITY CLERK AND TREASURER—Joseph Ingraham.

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CITY OFFICERS FOR 1858.

MAYOR—ANSEL PHELPS, JR.

ALDERMEN—Ward One, Samuel S. Day; Ward Two, Henry Fuller, Jr.; Ward Three, Henry Alexander, Jr.; Ward Four, Stephen C. Bemis; Ward Five, Joseph Hannis; Ward Six, James Warner; Ward Seven, Henry Pomroy; Ward Eight, Samuel Webber, Jr. (resigned), E. A. Fuller.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, John R. Hixon; Ward One, Wilson Eddy, William Pynchon, William L. Smith; Ward Two, Randolph E. Ladd, Ambrose N. Merrick, Charles B. Trask; Ward Three, John R. Hixon, Henry A. Chapin, Gurdon Bill; Ward Four, Samuel Leonard, John W. Hunt, R. G. Shumway; Ward Five, Charles Woodman, George Swetland, John Brooks; Ward Six, Elbridge Barton; Ward Seven, Joseph Wheelock, Jr.; Ward Eight, Erastus King.

CLERK—Charles O. Chapin.

CITY CLERK AND TREASURER—Joseph Ingraham.

CITY OFFICERS FOR 1859.

MAYOR—WILLIAM B. CALHOUN.

ALDERMEN—Ward One, Chauncey L. Covell; Ward Two, Roger S. Moore; Ward Three, Edmund Freeman; Ward Four, Daniel L. Harris; Ward Five, William Hitchcock; Ward Six, J. G. Capron; Ward Seven, Horace Smith; Ward Eight, George W. Holt.

CLERK—Joseph Ingraham.

COMMON COUNCILMEN—President, A. N. Merrick (resigned in May), Samuel Leonard; Ward One, Joshua M. Harrington, Justin M. Cooley, John V. Jones; Ward Two, George H. Roberts, Lewis H. Taylor, Gurdon C. Judson; Ward Three, A. N. Merrick, Daniel Gay, Hosea C. Lombard; Ward Four, Samuel Leonard, Alfred Rowe, Reuben T. Safford; Ward Five, Theodore Bishop, Walter Maynard, Walter North; Ward Six, Isaac D. Gibbons; Ward Seven, Ransley Hall; Ward Eight, Warren L. Shaw.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Joseph Ingraham.

CITY OFFICERS FOR 1860.

MAYOR—DANIEL L. HARRIS.

ALDERMEN—Ward One, Edmund B. Haskell; Ward Two, Erastus Hayes; Ward Three, Franklin Chamberlain; Ward Four, John W. Hunt; Ward Five, William Hitchcock; Ward Six, John G. Capron; Ward Seven, William Foster; Ward Eight, George W. Holt.

CLERK—Horace C. Lee.

COMMON COUNCILMEN—President, N. A. Leonard; Ward One, Joshua M. Harrington, H. S. Noyes, J. H. Demond; Ward Two, Lewis H. Taylor, George R. Townsley, Charles A. Winchester; Ward Three, William L. Wilcox, John Hamilton, Clark W. Bryan; Ward Four, N. A. Leonard, William Birnie, Alfred Rowe; Ward Five, William Higley, A. F. Strong, Charles Woodman; Ward Six, Robert Crossett; Ward Seven, Orrin Lombard; Ward Eight, Andrew J. Plumer.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Horace C. Lee.

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CITY OFFICERS FOR 1861.

MAYOR—STEPHEN C. BEMIS.

ALDERMEN—Ward One, Henry Gray; Ward Two, Ephraim W. Bond; Ward Three, H. N. Case; Ward Four, Nathaniel Howard; Ward Five, Charles Woodman; Ward Six, Amos Call; Ward Seven, William Smith; Ward Eight, A. J. Plumer.

CLERK—Horace C. Lee.

COMMON COUNCILMEN—President, N. A. Leonard; Ward One, H. J. Chapin, J. M. Cooley, J. H. Demond; Ward Two, Lewis H. Taylor, D. H. Brigham, F. B. Bacon; Ward Three, William L. Wilcox, John Hamilton, James M. Skiff; Ward Four, N. A. Leonard, John W. Bliss, Alfred Rowe; Ward Five, William Higley, Otis A. Seamans, A. W. Allen; Ward Six, Aaron C. Barton; Ward Seven, Henry Reynolds; Ward Eight, H. E. Moseley.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Horace C. Lee.

CITY OFFICERS FOR 1862.

MAYOR—STEPHEN C. BEMIS.

ALDERMEN—Ward One, Henry Gray; Ward Two, E. W. Bond; Ward Three, H. N. Case; Ward Four, T. W. Wason; Ward Five, Horace Kibbe; Ward Six, Horace Smith; Ward Seven, William Smith; Ward Eight, H. S. Evans.

CLERK—S. B. Spooner, Jr.

COMMON COUNCILMEN—President, N. A. Leonard; Ward One, Horace J. Chapin, L. O. Hanson, L. J. Powers; Ward Two, Sylvester Day, Tim Henry, Eli H. Patch; Ward Three, James M. Skiff, J. E. Taylor, A. F. Jennings; Ward Four, N. A. Leonard, Alfred Rowe, T. M. Walker; Ward Five, P. V. B. Havens, George K. Jacobs, George K. Charter; Ward Six, Aaron C. Barton; Ward Seven, Ezekiel Keith; Ward Eight, H. E. Moseley.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Samuel B. Spooner (resigned September 30), A. T. Folsom.

CITY OFFICERS FOR 1863.

MAYOR—HENRY ALEXANDER, JR.

ALDERMEN—Ward One, Justin M. Cooley; Ward Two, William Patton; Ward Three, William K. Baker; Ward Four, Daniel L. Harris; Ward Five, William Bodurtha; Ward Six, Horace Smith; Ward Seven, Virgil Perkins; Ward Eight, Andrew J. Plumer.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, N. A. Leonard; Ward One, N. W. Talcott, George S. Haskell, Luther Clark; Ward Two, O. H. Greenleaf, G. R. Townsley, John West; Ward Three, Aaron G. Lord, James M. Skiff, Francis S. Graves; Ward Four, N. A. Leonard, A. L. Soule, Henry S. Lee; Ward Five, Cheney Bigelow, George K. Charter (resigned), Charles Phelps, Orlando Chapin (resigned), William Collins; Ward Six, J. G. Chase; Ward Seven, C. P. L. Warner; Ward Eight, Hiram Warner.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1864.

MAYOR—HENRY ALEXANDER, JR.

ALDERMEN—Ward One, Norman W. Talcott; Ward Two, William Patton; Ward Three, Albert D. Briggs; Ward Four, Frederick H. Harris; Ward Five, Charles Barrows; Ward Six, Warren H. Wilkinson; Ward Seven, Virgil Perkins; Ward Eight, Harvey E. Moseley.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, N. A. Leonard; Ward One, Henry S. Hyde, John Mulligan, Charles H. Allen; Ward Two, O. H. Greenleaf, G. R. Townsley, J. F. Tannatt; Ward Three, Charles A. Winchester, W. H. Smith, A. N. Merrick; Ward Four, N. A. Leonard, A. L. Soule, Henry S. Lee; Ward Five, Charles Phelps, William Collins, S. W. Porter; Ward Six, L. H. Taylor; Ward Seven, Peter Valentine; Ward Eight, George Foster.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1865.

MAYOR—ALBERT D. BRIGGS.

ALDERMEN—Ward One, Henry S. Hyde; Ward Two, George R. Townsley; Ward Three, Otis Childs; Ward Four, Frederick H. Harris; Ward Five, Charles Barrows; Ward Six, Warren H. Wilkinson; Ward Seven, Virgil Perkins; Ward Eight, Andrew J. Plumer.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Henry S. Lee; Ward One, John Mulligan, W. H. Allis, H. S. Noyes; Ward Two, Gideon Wells, John Olmsted, J. F. Tannatt; Ward Three, William H. Smith, J. F. Tapley, H. N. Tinkham; Ward Four, N. A. Leonard, Henry S. Lee, S. J. Hall; Ward Five, Charles Phelps, S. W. Porter, J. Q. A. Sexton; Ward Six, Gustavus D. Tapley; Ward Seven, Rawson Hathaway; Ward Eight, George Foster.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1866.

MAYOR—ALBERT D. BRIGGS.

ALDERMEN—Ward One, William Pynchon; Ward Two, D. H. Brigham; Ward Three, Tim Henry; Ward Four, F. H. Harris; Ward Five, G. W. Harrison; Ward Six, W. H. Wilkinson; Ward Seven, John G. Taylor (died), Rawson Hathaway; Ward Eight, John Severson.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, William L. Smith; Ward One, J. H. Demond, Warren Emerson, J. C. McIntosh; Ward Two, Gideon Wells, H. M. Morehouse, George Dwight, Jr.; Ward Three, H. N. Tinkham, William H. Smith, Joseph H. Damon; Ward Four, D. B. Wesson, William L. Smith, W. S. Marsh; Ward Five, Charles Phelps, S. W. Porter, Charles Chapman; Ward Six, Gustavus D. Tapley; Ward Seven, John M. Meggett; Ward Eight, Samuel Mills.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1867.

MAYOR—ALBERT D. BRIGGS.

ALDERMEN—Ward One, John Mulligan; Ward Two, Tim Henry; Ward Three, H. N. Tinkham; Ward Four, F. H. Harris; Ward Five, Samuel W. Porter; Ward Six, Amos Call; Ward Seven, Rawson Hathaway; Ward Eight, John Severson.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, William L. Smith; Ward One, J. C. McIntosh, Warren Emerson, J. H. Demond; Ward Two, H. M. Morehouse, C. S. Hurlbut, L. A. Tifft; Ward Three, Charles Marsh, H. K. W. Dickinson, P. S. Bailey; Ward Four, W. L. Smith, W. S. Marsh, L. J. Powers; Ward Five, Charles Chapman, A. H. Clark, J. S. Brown; Ward Six, Charles A. Call; Ward Seven, E. W. Clark; Ward Eight, Samuel Mills.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1868.

MAYOR—CHARLES A. WINCHESTER.

ALDERMEN—Ward One, John Mulligan; Ward Two, Tim Henry; Ward Three, H. N. Tinkham; Ward Four, W. S. Marsh; Ward Five, Samuel W. Porter; Ward Six, Amos Call; Ward Seven, E. W. Clark; Ward Eight, Milo Chapin.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Henry S. Lee; Ward One, Warren Emerson, Josiah Bumstead, Roswell Lee; Ward Two, O. H. Greenleaf, Charles R. Ladd, Lewis A. Tifft; Ward Three, E. H. Patch, A. J. McIntosh, William H. Smith; Ward Four, Henry S. Lee, E. G. Norton, M. A. Clyde; Ward Five, Cyrus E. Buckland, Alden Warner, William R. Purple; Ward Six, George E. Howard; Ward Seven, Charles Gage; Ward Eight, George Swetland.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1869.

MAYOR—CHARLES A. WINCHESTER.

ALDERMEN—Ward One, J. M. Cooley; Ward Two, George Dwight; Ward Three, William H. Smith; Ward Four, W. S. Marsh; Ward Five, Joseph M. Hall; Ward Six, George E. Howard; Ward Seven, Charles Gage; Ward Eight, Charles J. Goodwin.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Henry S. Lee; Ward One, George M. Atwater, Josiah Bumstead, John Olmsted; Ward Two, Charles R. Ladd, O. H. Greenleaf, C. C. Smith; Ward Three, A. J. McIntosh, E. H. Patch, J. H. Appleton; Ward Four, Henry S. Lee, E. G. Norton, L. J. Powers; Ward Five, Alden Warner, E. B. Haskell, W. P. Taylor; Ward Six, I. P. Dickinson; Ward Seven, William H. Pinney; Ward Eight, George Swetland.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1870.

MAYOR—WILLIAM L. SMITH.

ALDERMEN—Ward One, J. A. Rumrill; Ward Two, Eliphalet Trask; Ward Three, Dr. John Hooker; Ward Four, Willis Phelps; Ward Five, Joseph M. Hall; Ward Six, I. P. Dickinson; Ward Seven, William H. Pinney; Ward Eight, George Foster.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Henry S. Lee; Ward One, Albert Holt, A. D. Day, C. B. Holbrook; Ward Two, George Dwight, Jr., James S. Bourke, David Legro; Ward Three, James E. McIntire, George W. Tapley, George S. Lewis; Ward Four, Henry S. Lee, Gurdon Bill, S. R. Phillips; Ward Five, Charles Phelps, William B. Miller, T. B. Wilson; Ward Six, George E. Howard; Ward Seven, John A. Hall; Ward Eight, Alfred S. Packard.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1871.

MAYOR—WILLIAM L. SMITH.

ALDERMEN—Ward One, Josiah Bumstead; Ward Two, Charles R. Ladd; Ward Three, Lawson Sibley; Ward Four, James M. Thompson; Ward Five, Richard F. Hawkins; Ward Six, Isaac P. Dickinson; Ward Seven, John A. Hall; Ward Eight, Noyes Barstow.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, Henry S. Lee; Ward One, Albert Holt, P. W. Brewster, F. J. Donahue; Ward Two, Milton Bradley, Tilly Haynes, R. Warren; Ward Three, B. C. English, S. B. Spooner, N. C. Newell; Ward Four, Henry S. Lee, Henry M. Phillips, E. A. Perkins; Ward Five, T. B. Wilson, J. C. Perry, E. B. Maynard; Ward Six, George E. Howard; Ward Seven, J. W. Lull; Ward Eight, George Swetland.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1872.

MAYOR—SAMUEL B. SPOONER.

ALDERMEN—Ward Two, Charles R. Ladd; Ward Three, William H. Smith; Ward Four, Emerson Wight; Ward Five, Joseph M. Hall, R. F. Hawkins; Ward Six, George E. Howard; Ward Seven, William H. Pinney; Ward Eight, Noyes Barstow.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, M. P. Knowlton; Ward One, F. J. Donahue, L. H. Powers, N. W. Fisk; Ward Two, O. H. Greenleaf, George W. Ray, Henry F. Trask; Ward Three, N. C. Newell, Samuel Palmer, George M. Smith; Ward Four, E. A. Perkins, H. M. Phillips, V. N. Taylor; Ward Five, M. P. Knowlton, E. B. Maynard, P. H. M. Brooks; Ward Six, E. A. Newell; Ward Seven, J. W. Lull; Ward Eight, W. L. Converse.

CLERK—Lucius E. Ladd.

CITY CLERK AND TREASURER—Albert T. Folsom

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CITY OFFICERS FOR 1873.

MAYOR—SAMUEL B. SPOONER.

ALDERMEN—Ward One, H. S. Hyde; Ward Two, George W. Ray; Ward Three, E. H. Patch; Ward Four, Emerson Wight; Ward Five, R. F. Hawkins; Ward Six, George E. Howard; Ward Seven, L. A. Tifft; Ward Eight, Noyes Barstow.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, M. P. Knowlton; Ward One, Florence J. Donahue, Noyes W. Fisk, Albert Holt; Ward Two, O. H. Greenleaf, H. F. Trask, S. C. Warriner; Ward Three, Joseph K. Newell, Charles M. Lee, Charles M. King; Ward Four, Varnum N. Taylor, E. A. Perkins, H. M. Phillips; Ward Five, M. P. Knowlton, J. D. McKnight, W. G. Chamberlain; Ward Six, E. A. Newell; Ward Seven, B. F. Farrar; Ward Eight, John Warriner.

CLERK—John A. Hall.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1874.

MAYOR—JOHN M. STEBBINS.

ALDERMEN—Ward One, Albert Holt; Ward Two, Hugh Donnelly; Ward Three, A. J. McIntosh; Ward Four, L. J. Powers; Ward Five, Albert W. Allen; Ward Six, I. P. Dickinson; Ward Seven, J. W. Lull; Ward Eight, Henry C. Fuller.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, T. B. Wilson; Ward One, D. J. Curtis, Horace Wheeler, James A. Byrnes; Ward Two, L. B. Lillie, M. L. Tourtellotte, P. J. Ryan; Ward Three, B. S. Haskins, Charles A. King, August Sheppert; Ward Four, J. H. Appleton, Homer Foot, Jr., D. J. Marsh; Ward Five, W. G. Chamberlain, T. B. Wilson, Benjamin Hannis; Ward Six, Daniel Schoonmaker; Ward Seven, E. W. Ladd; Ward Eight, John Warriner.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1875.

MAYOR—EMERSON WIGHT.

ALDERMEN—Ward One, Hinsdale Smith; Ward Two, D. H. Brigham; Ward Three, F. H. Fuller; Ward Four, L. J. Powers; Ward Five, W. G. Chamberlain; Ward Six, Amos Call; Ward Seven, Rawson Hathaway; Ward Eight, H. K. Wight.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Henry S. Lee; Ward One, Horace Wheeler, James A. Byrnes, N. W. Fisk; Ward Two, S. E. Seymour, H. F. Trask, M. L. Tourtellotte; Ward Three, J. K. Newell, A. J. Plumer, J. K. Winter; Ward Four, Henry S. Lee, D. L. Harris, J. S. Carr; Ward Five, B. S. Haskins, Benjamin Hannis, E. S. Stacy; Ward Six, Daniel Schoonmaker; Ward Seven, E. P. Cook; Ward Eight, D. P. Woolson.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1876.

MAYOR—EMERSON WIGHT.

ALDERMEN—Ward One, N. W. Talcott; Ward Two, George Dwight; Ward Three, J. K. Newell; Ward Four, Henry S. Lee; Ward Five, N. I. Hawley; Ward Six, D. L. Swan; Ward Seven, Rawson Hathaway; Ward Eight, H. K. Wight.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, H. F. Trask; Ward One, John Mulligan, J. M. Cooley, J. J. Moore; Ward Two, Milton Bradley, H. F. Trask, M. L. Tourtellotte; Ward Three, H. N. Tinkham, J. F. Tapley, Elijah Nichols; Ward Four, W. S. Shurtleff, D. L. Harris, J. S. Carr; Ward Five, H. W. Phelps, Edwin McElwain, E. S. Stacy; Ward Six, R. R. McGregor; Ward Seven, Larkin Newell; Ward Eight, Samuel F. Smith.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1877.

MAYOR—EMERSON WIGHT.

ALDERMEN—Ward One, John Olmsted; Ward Two, George Dwight; Ward Three, J. F. Tapley; Ward Four, Henry S. Lee; Ward Five, N. I. Hawley (resigned), Benj. Hannis; Ward Six, D. L. Swan; Ward Seven, W. H. Pinney; Ward Eight, H. K. Wight.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, H. F. Trask; Ward One, John Mulligan, N. W. Fisk, L. H. Powers; Ward Two, H. F. Trask, M. L. Tourtellotte, George E. Frink; Ward Three, H. N. Tinkham, Elijah Nichols, George B. Smith; Ward Four, Daniel L. Harris, William S. Shurtleff, J. K. Newell; Ward Five, Edwin McElwain, John A. Hall, A. J. Wright; Ward Six, H. C. Puffer; Ward Seven, E. W. Ladd; Ward Eight, Milo Chapin.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1878.

MAYOR—EMERSON WIGHT.

ALDERMEN—Ward One, John Olmsted; Ward Two, George Dwight; Ward Three, J. F. Tapley; Ward Four, Henry S. Lee; Ward Five, John A. Hall; Ward Six, D. L. Swan; Ward Seven, W. H. Pinney; Ward Eight, H. K. Wight.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, A. J. Wright; Ward One, John Mulligan, L. H. Powers, E. Belding; Ward Two, Dr. H. G. Stickney, Dr. A. R. Rice, E. M. Bartlett; Ward Three, Elijah Nichols, George B. Smith, J. R. Smith; Ward Four, W. S. Shurtleff, J. K. Newell, H. A. Gould; Ward Five, A. J. Wright, N. W. Howard, S. L. Hodgdon; Ward Six, George R. Dickinson; Ward Seven, Edwin W. Ladd; Ward Eight, F. M. Bardwell.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1879.

MAYOR—LEWIS J. POWERS.

ALDERMEN—Ward One, John Olmsted; Ward Two, George Dwight; Ward Three, J. F. Tapley; Ward Four, George W. Tapley; Ward Five, Benjamin Hannis; Ward Six, George R. Dickinson; Ward Seven, E. W. Ladd; Ward Eight, H. K. Wight.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, J. R. Smith; Ward One, John Mulligan, E. Belding, J. W. Baldwin; Ward Two, E. H. Phelps, Horace Jacobs, F. A. Judd; Ward Three, J. R. Smith, Elijah Nichols, Frank E. Winter; Ward Four, Henry A. Gould, George B. Holbrook, C. J. Sanderson; Ward Five, N. W. Howard, S. L. Hodgdon, M. J. Chamberlain; Ward Six, E. M. Lombard; Ward Seven, Charles Taylor; Ward Eight, F. M. Bardwell.

CLERK— E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1880.

MAYOR—LEWIS J. POWERS.

ALDERMEN—Ward One, John Olmsted; Ward Two, S. C. Warriner; Ward Three, J. F. Tapley; Ward Four, George W. Tapley; Ward Five, Benjamin Hannis; Ward Six, George R. Dickinson; Ward Seven, E. W. Ladd; Ward Eight, H. K. Wight.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Elijah Belding; Ward One, E. Belding, Ethan C. Robinson, Harlan P. Stone; Ward Two, Fred A. Judd, E. H. Young, E. M. Bartlett; Ward Three, Elijah Nichols, Frank E. Winter, Emory Meekins; Ward Four, George B. Holbrook, Charles J. Sanderson, William H. Haile; Ward Five, Nathaniel W. Howard, Sewall L. Hodgdon, James D. Gill; Ward Six, Edward M. Lombard; Ward Seven, Charles Taylor; Ward Eight, Frank M. Bardwell.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1881.

MAYOR—WILLIAM H. HAILE.

ALDERMEN—Ward One, Elijah Belding; Ward Two, Stephen E. Seymour; Ward Three, Elijah Nichols; Ward Four, Edward P. Chapin; Ward Five, Oscar D. Adams; Ward Six, Edward M. Lombard; Ward Seven, George Nye; Ward Eight, H. K. Wight.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Charles J. Sanderson; Ward One, Harlan P. Stone, Hoyt E. Howard, Henry J. Beebe; Ward Two, Fred A. Judd, Edwin M. Bartlett, John Lobeits; Ward Three, George P. Stebbins, Jacob C. Luts, Simpson Clark; Ward Four, Charles J. Sanderson, William B. Walker, Edmund P. Kendrick; Ward Five, James D. Gill, Henry Dana, James F. Brierly; Ward Six, Albert E. Foth; Ward Seven, William C. Bemis; Ward Eight, George Foster.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1882.

MAYOR—EDWIN W. LADD.

ALDERMEN—Ward One, Henry D. Carroll; Ward Two, Stephen E. Seymour; Ward Three, Elijah Nichols; Ward Four, Edward P. Chapin; Ward Five, Oscar D. Adams; Ward Six, Edward M. Lombard; Ward Seven, George Nye; Ward Eight, Davenport L. Fuller.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, Edmund P. Kendrick; Ward One, Harlan P. Stone, Henry J. Beebe, Ethan C. Robinson; Ward Two, Fred A. Judd, Frank M. Bugbee, Frank E. Carpenter; Ward Three, Simpson Clark, Jacob C. Luts, James D. Parsons; Ward Four, Edmund P. Kendrick, James C. Alden, Edward C. Rogers; Ward Five, Henry Dana, Charles E. Dodge, Charles Fuller; Ward Six, George McGregory; Ward Seven, John S. Sanderson; Ward Eight, Edward D. Chapman.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1883.

MAYOR—HENRY M. PHILLIPS.

ALDERMEN—Ward One, Harlan P. Stone; Ward Two, Fred A. Judd; Ward Four, James Kirkham; Ward Four, James C. Alden; Ward Five, James D. Gill; Ward Six, Charles A. Call; Ward Seven, George Nye; Ward Eight, John S. Sanderson.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, E. P. Kendrick; Ward One, Charles McKay, J. F. Callanan, John L. Knight; Ward Two, Frank E. Carpenter, Frank M. Bugbee, James A. Bill, Jr.; Ward Three, Jacob C. Luts, Simpson Clark, W. F. Cook; Ward Four, Edmund P. Kendrick, Edward C. Rogers. Thomas D. Lyon; Ward Five, George H. Wells, James Kimball, Whiteman T. Steere; Ward Six, Oscar S. Greenleaf; Ward Seven, George W. Hall; Ward Eight, John Rivers.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1884.

MAYOR—HENRY M. PHILLIPS.

ALDERMEN—Ward Two, Andrew Y. Beach; Ward Three, Jacob C. Luts; Ward Four, George W. Tapley; Ward Five, Henry M. Brewster; Ward Six, Charles A. Call; Ward Seven, George Nye, John S. Sanderson; Ward Eight, Davenport L. Fuller.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Edward C. Rogers; Ward One, Henry L. Whitcomb, John L. Knight, Patrick C. O'Connor; Ward Two, Hosea C. Lombard, James A. Bill, Jr., James N. Dodge; Ward Three, Simpson Clark, George F. Clark, James S. Adams; Ward Four, Edward C. Rogers, Charles L. Long, Thomas D. Lyon; Ward Five, George H. Wells, James Kimball, J. H. Hendrick; Ward Six, Oscar S. Greenleaf; Ward Seven, George W. Hall; Ward Eight, John Rivers.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1885.

MAYOR—HENRY M. PHILLIPS.

ALDERMEN—Ward One, John L. Knight; Ward Two, Andrew Y. Beach; Ward Three, Jacob C. Lutz; Ward Four, Daniel P. Crocker; Ward Five, Charles Taylor; Ward Six, Charles A. Call; Ward Seven, John S. Sanderson; Ward Eight, George W. Miller.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Charles L. Long; Ward One, George E. Frink, James F. Bidwell, Henry M. Castle; Ward Two, James A. Bill, Jr., Hosea C. Lombard, Edwin F. Lyford; Ward Three, Edgar C. Whittemore, Richard D. Whitney, John H. Clune; Ward Four, Henry H. Bowman, Charles L. Long, Alfred N. Mayo; Ward Five, George H. Wells, Joel H. Hendrick, James Kimball; Ward Six, Oscar S. Greenleaf; Ward Seven, Richard W. Pinney; Ward Eight, Horatio E. D. Green.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1886.

MAYOR—EDWIN D. METCALF.

ALDERMEN—President, Andrew Y. Beach; Ward One, James F. Bidwell; Ward Two, Andrew Y. Beach; Ward Three, George B. Holbrook; Ward Four, George W. Tapley; Ward Five, Joel H. Hendrick; Ward Six, Walter H. Wesson; Ward Seven, Richard W. Pinney; Ward Eight, George W. Miller.

CLERK—A. T. Folsom.

COMMON COUNCILMEN—President, Charles L. Long; Ward One, George E. Frink, Charles A. Fisk, R. Hale Smith; Ward Two, James A. Bill, Jr., Edwin F. Lyford, Samuel J. Whyte; Ward Three, John H. Clune, Claudius C. Margerum, William F. Callender; Ward Four, Charles L. Long, Henry H. Bowman, Alfred N. Mayo; Ward Five, Thomas S. Stewart, Edward S. Bradford, Marcus M. Kendall; Ward Six, William L. Dickinson; Ward Seven, George W. Hall; Ward Eight, Horatio E. D. Green.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

CITY OFFICERS FOR 1887.

MAYOR—E. B. MAYNARD.

ALDERMEN—President, James F. Bidwell; Ward One, James F. Bidwell; Ward Two, Frank M. Bugbee; Ward Three, William F. Callender; Ward Four, William H. Wright; Ward Five, Sherman D. Porter; Ward Six, William L. Dickinson; Ward Seven, Richard W. Pinney; Ward Eight, John Rivers.

CLERK—Albert T. Folsom.

COMMON COUNCILMEN—President, Henry H. Bowman; Ward One, Frederick H. Stebbins, John Dollan, Frank C. Leonard; Ward Two, Frank S. Crane, James A. Bill, Jr., Newrie D. Winter; Ward Three, Claudius C. Margerum, James E. Dunleavy, Howard N. Newell; Ward Four, Henry H. Bowman, William W. More, Charles E. Brown; Ward Five, Edward S. Bradford, Marcus M. Kendall, William C. Newell; Ward Six, Edward J. Flannery; Ward Seven, Landomer E. Pease; Ward Eight, James H. Morley.

CLERK—E. A. Newell.

CITY CLERK AND TREASURER—Albert T. Folsom.

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CITY OFFICERS FOR 1888.

MAYOR—E. B. MAYNARD.

ALDERMEN—President, Frank M. Bugbee; Ward One, John C. McIntosh; Ward Two, Frank M. Bugbee; Ward Three, Lawson Sibley; Ward Four, William H. Wright; Ward Five, Sherman D. Porter; Ward Six, William L. Dickinson; Ward Seven, Richard W. Pinney; Ward Eight, John Rivers.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Newrie D. Winter; Ward One, Frederick H. Stebbins, Frank C. Leonard, George W. Turner; Ward Two, Newrie D. Winter, Charles C. Parkhurst, Edward F. Tower; Ward Three, James E. Dunleavy, Frederick S. Newman, Leonard Schadt; Ward Four, William W. More, Charles E. Brown, George Leonard; Ward Five, Edward S. Bradford, Marcus M. Kendall, James W. Anderson; Ward Six, Edward J. Flannery; Ward Seven, Charles E. Ladd; Ward Eight, E. A. Grise.

CLERK—Tom Fitzgibbon.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

CITY OFFICERS FOR 1889.

MAYOR—EDWARD S. BRADFORD.

ALDERMEN—President, John C. McIntosh; Ward One, John C. McIntosh; Ward Two, Charles C. Parkhurst; Ward Three, Herbert C. Puffer; Ward Four, John A. Murphy; Ward Five, John McFethries; Ward Six, Henry S. Dickinson; Ward Seven, George W. Hall; Ward Eight, Orson Moulton.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, George Leonard; Ward One, George W. Turner, Leroy Z. Cutler, William F. Ray; Ward Two, Waldo R. Forrester, Francke W. Dickinson, Dr. George E. Foster; Ward Three, Leonard Schadt, Jacob G. Luts, John P. Casman; Ward Four, William W. More, George Leonard, Charles Van Vlack; Ward Five, Milan W. Bull, Ruel R. Nickerson, Thomas H. Benton; Ward Six, Cornelius W. Phillips; Ward Seven, Charles E. Ladd; Ward Eight, Loren W. King.

CLERK—Andrew O. McGarrett.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

CITY OFFICERS FOR 1890.

MAYOR—EDWARD S. BRADFORD.

ALDERMEN—President, Henry S. Dickinson; Ward One, George W. Turner; Ward Two, Charles C. Parkhurst; Ward Three, George B. Holbrook; Ward Four, John A. Murphy; Ward Five, Edmund P. Kendrick; Ward Six, Henry S. Dickinson; Ward Seven, George W. Hall; Ward Eight, Orrin E. Tilley.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, George Leonard; Ward One, Leroy Z. Cutler, William F. Ray, Louis C. Hyde; Ward Two, Francke W. Dickinson, George D Fisk, John B. King; Ward Three, John P. Casman, Arthur A. Couch, George J. Seuss; Ward Four, George Leonard, Charles VanVlack, Frederick H. Gillett; Ward Five, Milan W. Bull, George H. Clark, George H. Kemater; Ward Six, Cornelius W. Phillips; Ward Seven, Benjamin C. Harvey; Ward Eight, Charles E. Jennings.

CLERK—Andrew O. McGarrett.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

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CITY OFFICERS FOR 1891.

MAYOR—EDWARD S. BRADFORD.

ALDERMEN—President, John A. Murphy; Ward One, Louis C. Hyde; Ward Two, Charles C. Parkhurst; Ward Three, George B. Holbrook; Ward Four, John A. Murphy; Ward Five, Edward H. Lathrop; Ward Six, Frederick Harris; Ward Seven, Benjamin C. Harvey; Ward Eight, Orrin E. Tilley.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Francke W. Dickinson; Ward One, Henry E. Marsh, John McDonald, Charles H. Mulligan; Ward Two, Francke W. Dickinson, John B. King, Dwight O. Gilmore; Ward Three, George J. Seuss, Charles W. Turk, Jeremiah F. Mahoney; Ward Four, Charles Van Vlack, W. F. Adams, James D. Norton; Ward Five, Milan W. Bull, George H. Clark, George H. Kemater; Ward Six, George M. Stebbins; Ward Seven, Thomas A. Holland; Ward Eight, Charles E. Jennings.

CLERK—Andrew O. McGarrett.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

CITY OFFICERS FOR 1892.

MAYOR—LAWSON SIBLEY.

ALDERMEN—President, Frederick Harris; Ward One, Louis C. Hyde; Ward Two, Frank E. Carpenter; Ward Three, Claudius C. Margerum; Ward Four, Charles M. Mather; Ward Five, Samuel D. Sherwood; Ward Six, Frederick Harris; Ward Seven, Benjamin C. Harvey; Ward Eight, Leonard B. Richardson.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, James D. Norton; Ward One, William P. Hayes, Charles H. Mulligan, Henry W. Sexton; Ward Two, Edwin A. Carter, Dwight O. Gilmore, James J. Sullivan; Ward Three, George J. Seuss, Jeremiah F. Mahoney, John Sharrocks; Ward Four, W. F. Adams, James D. Norton, Charles E. Stickney; Ward Five, William M. Gray, William A. Harris, Stillman L. Tuttle; Ward Six, George M. Stebbins; Ward Seven, Thomas A. Holland; Ward Eight, Henry A. Braman.

CLERK—Andrew O. McGarrett, (resigned)—Wm. E. Gilbert.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

CITY OFFICERS FOR 1893.

MAYOR—EDMUND P. KENDRICK.

ALDERMEN—President, George Nye; Ward One, Olin H. Smith; Ward Two, Dwight O. Gilmore; Ward Three, Claudius C. Margerum; Ward Four, Henry H. Bowman; Ward Five, George Nye; Ward Six, Nathan D. Bill; Ward Seven, Benjamin C. Harvey; Ward Eight, Leonard B. Richardson.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, James D. Norton; Ward One, William P. Hayes, Charles H. Mulligan, Winford N. Caldwell; Ward Two, Walter G. Morse, Charles W. Perkins, George B. Rathbun; Ward Three, Harry P. Elsey, George F. Sessions, Charles Workheiser; Ward Four, W. F. Adams, James D. Norton, Charles E. Stickney; Ward Five, William A. Harris, Edwin S. Field, Frederick B. Miller; Ward Six, Eugene Young; Ward Seven, William H. Gage; Ward Eight, Merrill E. Streeter.

CLERK—William E. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—E. T. Tifft.

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CITY OFFICERS FOR 1894.

MAYOR—EDMUND P. KENDRICK.

ALDERMEN—President, Henry H. Bowman; Ward One, Olin H. Smith; Ward Two, Dwight O. Gilmore; Ward Three, Gustave Remkus; Ward Four, Henry H. Bowman; Ward Five, George A. Russell; Ward Six, Claudius C. Margerum; Ward Seven, Daniel W. Ware; Ward Eight, Merrill E. Streeter.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, George F. Sessions; Ward One, William C. Hayes, Charles L. Burr, George F. Fuller; Ward Two, Maurice P. Cavanaugh, Charles W. Perkins, Frank H. Elwell; Ward Three, Harry P. Elsey, George F. Sessions, Robert A. Grant; Ward Four, Howard A. Gibbs, Robert A. Knight, Paul R. Hawkins; Ward Five, Edwin S. Field, Frederick B. Miller, Fred C. Wright; Ward Six, Edward C. Hamilton; Ward Seven, William S. Bemis; Ward Eight, Philip C. Sullivan.

CLERK—William E. Gilbert.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

CITY OFFICERS FOR 1895.

MAYOR—CHARLES L. LONG.

ALDERMEN—President, George A. Russell; Ward One, George F. Fuller; Ward Two, Albert E. Foth; Ward Three, Gustave Remkus; Ward Four, Henry L. Gaylord; Ward Five, George A. Russell; Ward Six, Walter P. Goodenough; Ward Seven, Daniel W. Ware; Ward Eight, Merrill E. Streeter.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Robert A. Knight; Ward One, Charles L. Burr, Lewis D. Robinson, Willard F. Tripp; Ward Two, Maurice P. Cavanaugh, Frank H. Elwell, Charles D. Rathbun; Ward Three, Adin W. Bangs, Robert A. Grant, George W. D. Upton; Ward Four, Howard A. Gibbs, Paul R. Hawkins, Robert A. Knight; Ward Five, Albert P. Casey, Augustus A. Howard, Frederick B. Miller; Ward Six, Edward C. Hamilton; Ward Seven, Charles E. Ladd; Ward Eight, John R. Reed.

CLERK—William E. Gilbert.

CITY CLERK—E. A. Newell.

CITY TREASURER—E. T. Tifft.

CITY OFFICERS FOR 1896.

MAYOR—NEWRIE D. WINTER.

ALDERMEN—President, Henry S. Dickinson; Ward One, Charles L. Burr; Ward Two, Dwight O. Gilmore; Ward Three, George J. Seuss; Ward Four, Henry S. Dickinson; Ward Five, Charles H. Parsons; Ward Six, Charles Rogers; Ward Seven, Charles E. Ladd; Ward Eight, Octave A. La Riviere.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Maurice P. Cavanaugh; Ward One, Frank H. Bills, William J. McCann, Willard F. Tripp; Ward Two, Maurice P. Cavanaugh, Harry C. Collins, Charles T. Winchester; Ward Three, Henry D. Marsh, Frank D. Quilty, George W. D. Upton; Ward Four, Ralph W. Ellis, Zera W. Smith, Fred H. Sturtevant; Ward Five, Frank W. Barker, Augustus A. Howard, Edward R. Lee; Ward Six, Frank D. Kemp; Ward Seven, William W. Bartlett; Ward Eight, Charles O. Churchill.

CLERK—William E. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—E. T. Tifft.

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CITY OFFICERS FOR 1897.

MAYOR—HENRY S. DICKINSON.

ALDERMEN—President, Dwight O. Gilmore; Ward One, Willard F. Tripp; Ward Two, Charles H. Mulligan; Ward Three, Dwight O. Gilmore; Ward Four, Ralph W. Ellis; Ward Five, Charles C. Lewis; Ward Six, Edward C. Hamilton; Ward Seven, Charles E. Brown; Ward Eight, Homer D. Packard.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Frank W. Barker; Ward One, Orville A. Dodge, Lewis D. Robinson; Ward Two, Luke J. Coogan, Henry D. Shaw, Harry J. Vesper; Ward Three, Charles H. Dunham, Frank H. Elwell; Ward Four, Lewis F. Carr, Charles E. Newell; Ward Five, Frank W. Barker, Stanford L. Haynes; Ward Six, Fred A. Bearse, Dennis Casey, Jr.; Ward Seven, George A. Bacon, William W. Bartlett; Ward Eight, Charles O. Churchill, Alexander C. Methven, Fordis C. Parker.

CLERK—William E. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1898.

MAYOR—HENRY S. DICKINSON.

ALDERMEN—President, Dwight O. Gilmore; Ward One, Lewis D. Robinson; Ward Two, Charles H. Mulligan; Ward Three, Dwight O. Gilmore; Ward Four, Ralph W. Ellis; Ward Five, Charles C. Lewis; Ward Six, Edward C. Hamilton; Ward Seven, Charles E. Brown; Ward Eight, Homer D. Packard.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Fordis C. Parker; Ward One, Orville A. Dodge, Franklin A. Latimer, Jr.; Ward Two, Luke J. Coogan, Matthew R. Mansfield, William A. Strange; Ward Three, Edward T. Davis, Harry H. Parkhurst; Ward Four, Lewis F. Carr, Charles E. Newell; Ward Five, Fordis C. Parker, Stanford L. Haynes; Ward Six, Fred A. Bearse, Samuel M. Jones; Ward Seven, George A. Bacon, Seth J. Buckland; Ward Eight, Albert E. W. Drake, Alexander C. Methven, William F. Mundell.

CLERK—William E. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1899.

MAYOR—DWIGHT O. GILMORE.

ALDERMEN—President, Charles H. Mulligan; Ward One, Franklin A. Latimer, Jr,; Ward Two, Charles H. Mulligan; Ward Three, Frank H. Elwell; Ward Four, Edwin A. Blodgett; Ward Five, Fordis C. Parker; Ward Six, Fred A. Bearse; Ward Seven, Julius F. Carman; Ward Eight, Alexander C. Methven.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Fred O. Clapp; Ward One, Fred O. Clapp, Edwin B. Woodin; Ward Two, Luke J. Coogan, Patrick J. McCarty, Patrick J. Mitchell; Ward Three, Gottlieb Baer, George W. D. Upton; Ward Four, Lincoln C. Haynes, William W. Tapley; Ward Five, Theodore F. Dwight, Charles A. Wright; Ward Six, Frederick S. Ladd, George Smith; Ward Seven, Albert G. Bennett, Jr., Seth J. Buckland; Ward Eight, Albert E. W. Drake, William F. Mundell, Woodward E. Murkland.

CLERK—William E. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1900.

MAYOR—WILLIAM P. HAYES.

ALDERMEN—President, Edwin A. Blodgett; Ward One, Fred O. Clapp; Ward Two, Henry W. Fitch; Ward Three, Frank H. Elwell; Ward Four, Edwin A. Blodgett; Ward Five, Fordis C. Parker; Ward Six, Fred A. Bearse; Ward Seven, Julius F. Carman; Ward Eight, Alexander C. Methven.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Albert G. Bennett, Jr.; Ward One, Clifford P. Kibbe, William E. Sanderson; Ward Two, Patrick J. Mitchell, James E. Dunn, John M. Sullivan; Ward Three, George W. D. Upton, Napoleon L. Byron; Ward Four, William W. Tapley, F. Winthrop Edwards; Ward Five, Theodore F. Dwight, George Nye, Jr.; Ward Six, George Smith, Eugene M. Tinkham; Ward Seven, Albert G. Bennett, Jr., William A. Newton; Ward Eight, William F. Mundell, Oliver E. Hines, Everett E. Stone.

CLERK—William E. Gilbert (resigned), H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1901.

MAYOR—WILLIAM P. HAYES.

ALDERMEN—President, Fred O. Clapp; Ward One, Fred O. Clapp; Ward Two, Henry W. Fitch; Ward Three, Henry D. Marsh; Ward Four, William W. Tapley; Ward Five, Henry H. Bosworth; Ward Six, Frank D. Kemp; Ward Seven, Albert G. Bennett, Jr.; Ward Eight, Edward J. Murphy.

CLERK—E. A. Newell.

COMMON COUNCILMEN—President, Everett E. Stone; Ward One, Clifford P. Kibbe, William E. Sanderson; Ward Two, Patrick J. Mitchell, James E. Dunn, Patrick J. Delaney; Ward Three, George H. McClean, William W. Warren; Ward Four, F. Winthrop Edwards, Henry P. Norris; Ward Five, Calvin S. Whitcomb, George Nye, Jr.; Ward Six, John J. Hamilton, Eugene M. Tinkham; Ward Seven, Henry G. Chapin, William A. Newton; Ward Eight, Oliver E. Hines, Everett E. Stone, William T. Webster.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1902.

MAYOR—RALPH W. ELLIS.

ALDERMEN—President, Fred O. Clapp; Ward One, Fred O. Clapp; Ward Two, Henry W. Fitch; Ward Three, Napoleon L. Byron; Ward Four, William W. Tapley; Ward Five, Henry H. Bosworth; Ward Six, Paul R. Hawkins; Ward Seven, Albert G. Bennett, Jr.; Ward Eight, Everett E. Stone.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, William E. Sanderson; Ward One, Clifford P. Kibbe, William E. Sanderson; Ward Two, Sylvester P. Callanan, Patrick J. Delaney, James E. Dunn; Ward Three, Charles F. Bogardus, George H. McClean; Ward Four, Henry P. Norris, Alfred F. H. Pillsbury; Ward Five, George Nye, Jr., Calvin S. Whitcomb; Ward Six, Joseph C. Allen, John J. Hamilton; Ward Seven, Henry G. Chapin, Edward O. Doten; Ward Eight, Henry S. Keyes, Charles S. Potter, William T. Webster.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1903.

MAYOR—EVERETT E. STONE.

ALDERMEN—President, Napoleon L. Byron; Ward One, William E. Sanderson; Ward Two, Willis A. Ford; Ward Three, Napoleon L. Byron; Ward Four, Henry P. Norris; Ward Five, Francke W. Dickinson; Ward Six, Joseph C. Allen; Ward Seven, Oscar S. Greenleaf; Ward Eight, Oliver E. Hines.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Henry G. Chapin; Ward One, William C. Bartlett, Wayland V. James; Ward Two, Patrick J. Delaney, Thomas J. Burke, William H. Grady; Ward Three, George V. Lovely, Samuel H. Trask; Ward Four, Alfred F. H. Pillsbury, Arthur H. Rogers; Ward Five, William A. Dodge, Fred L. Safford; Ward Six, Clinton Gowdy, Albert R. Green; Ward Seven, Albert W. Allen, Henry G. Chapin; Ward Eight, Henry S. Keyes, Charles S. Potter, Edward P. Blague.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1904.

MAYOR—EVERETT E. STONE.

ALDERMEN—President, Napoleon L. Byron; Ward One, William E. Sanderson; Ward Two, Willis A. Ford; Ward Three, Napoleon L. Byron; Ward Four, Henry P. Norris; Ward Five, Francke W. Dickinson; Ward Six, Frederick S. Ladd; Ward Seven, Oscar S. Greenleaf; Ward Eight, William R. Sessions.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Henry G. Chapin; Ward One, William C. Bartlett, Henry N. Bowman; Ward Two, Thomas J. Burke, William H. Grady, William F. Houlihan; Ward Three, George H. Hadd, Samuel H. Trask; Ward Four, Alfred F. H. Pillsbury, Arthur H. Rogers; Ward Five, William A. Dodge, Fred L. Safford; Ward Six, Albert R. Green, Frank E. Stacy; Ward Seven, Albert W. Allen, Henry G. Chapin; Ward Eight, Henry S. Keyes, Charles S. Potter, Howard O. Buck.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1905.

MAYOR—FRANCKE W. DICKINSON.

ALDERMEN—President, William E. Sanderson; Ward One, William E. Sanderson; Ward Two, Willis A. Ford; Ward Three, William S. Warriner; Ward Four, Henry P. Norris; Ward Five, Joseph P. Falt; Ward Six, Frederick S. Ladd; Ward Seven, Albert W. Allen; Ward Eight, William R. Sessions.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Charles S. Potter; Ward One, Charles Adams, Henry N. Bowman; Ward Two, William F. Houlihan, William H. Grady, Michael J. Scully; Ward Three, George H. Hadd, George H. Crouss; Ward Four, Alfred F. H. Pillsbury, Arthur H. Rogers; Ward Five, William A. Dodge, Winthrop I. Davis; Ward Six, Frank E. Stacy, Henry R. Morrissey; Ward Seven, Fred R. Brown, Edwin G. Remkus; Ward Eight, Charles S. Potter, Howard O. Buck, Ralph Waldo Wight.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1906.

MAYOR—FRANCKE W. DICKINSON.

ALDERMEN—President, William E. Sanderson; Ward One, William E. Sanderson; Ward Two, Willis A. Ford; Ward Three, William S. Warriner; Ward Four, Arthur H. Rogers; Ward Five, Joseph P. Falt; Ward Six, Frederick S. Ladd; Ward Seven, Albert W. Allen; Ward Eight, Charles S. Potter.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Ralph Waldo Wight; Ward One, Charles Adams, Henry N. Bowman; Ward Two, John J. Collins, William H. Grady, Michael J. Scully; Ward Three, George H. Hadd, George H. Crouss; Ward Four, Alfred F. H. Pillsbury, Arthur E. Corbin; Ward Five, William A. Dodge, Winthrop I. Davis; Ward Six, George D. Chamberlain, Henry R. Morrissey; Ward Seven, Fred R. Brown, John Lafayette Scott; Ward Eight, William Addison, Ralph Waldo Wight, Howard O. Buck (resigned).

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1907.

MAYOR—WILLIAM E. SANDERSON.

ALDERMEN—President, Willis A. Ford; Ward One, Henry N. Bowman; Ward Two, Willis A. Ford; Ward Three, Geo. H. Crouss; Ward Four, Arthur H. Rogers; Ward Five, Alfred F. H. Pillsbury; Ward Six, Frederick S. Ladd; Ward Seven, Fred R. Brown; Ward Eight, Charles S. Potter.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Ralph W. Wight; Ward One, Charles Adams, John Henry Curtiss; Ward Two, Geo. C. Connell, Michael J. Scully, John J. Collins; Ward Three, George H. Hadd, Albert A. Mathews; Ward Four, Edward P. Butts, Arthur E. Corbin; Ward Five, William A. Dodge, Winthrop I. Davis; Ward Six, Frank E. Stacy, George D. Chamberlain; Ward Seven, John L. Scott, Edward W. Maynard; Ward Eight, William Addison, Ralph W. Wight, George M. Howe.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1908.

MAYOR—WILLIAM E. SANDERSON.

ALDERMEN—President, Alfred F. H. Pillsbury; Ward One, Henry N. Bowman; Ward Two, Henry Lasker; Ward Three, Geo. H. Crouss, deceased—Nelson L. Elmer; Ward Four, Arthur H. Rogers; Ward Five, Alfred F. H. Pillsbury; Ward Six, George D. Chamberlain; Ward Seven, Fred R. Brown; Ward Eight, Ralph W. Wight.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Frank E. Stacy; Ward One, Charles Adams, John Henry Curtiss; Ward Two, Michael J. Scully, John J. Collins, George C. Connell; Ward Three, George H. Hadd, Albert A. Mathews; Ward Four, Edward P. Butts, John A. Denison; Ward Five, Robert N. Ingersoll, J. Frank Drake; Ward Six, Frank E. Stacy, Harcourt Wesson Bull; Ward Seven, John L. Scott, Edward W. Maynard; Ward Eight, George M. Howe, Jay W. Nickels, John W. Superneaw.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1909.

MAYOR—WILLIAM E. SANDERSON.

ALDERMEN—President, Henry N. Bowman; Ward One, Henry N. Bowman; Ward Two, Henry Lasker; Ward Three, Nelson L. Elmer; Ward Four, Arthur H. Rogers; Ward Five, William A. Dodge; Ward Six, George D. Chamberlain; Ward Seven, John L. Scott; Ward Eight, Ralph W. Wight.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, John A. Denison; Ward One, John Henry Curtiss, Joseph G. Merrick; Ward Two, John J. Collins, James A. Sullivan, John J. Walsh; Ward Three, George H. Hadd, Albert A. Mathews; Ward Four, John A. Denison, Everett E. Belding; Ward Five, Robert N. Ingersoll, J. Frank Drake; Ward Six, Frank E. Stacy, Harcourt Wesson Bull; Ward Seven, Julian R. Albee, Edward T. Broadhurst; Ward Eight, Charles M. Goodwin, John G. Maxfield, Jay W. Nickels.

CLERK—H. S. Gilbert.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1910.

MAYOR—EDWARD H. LATHROP.

ALDERMEN—President, Henry N. Bowman; Ward One, Henry N. Bowman; Ward Two, Henry Lasker; Ward Three, Nelson L. Elmer; Ward Four, John A. Denison; Ward Five, William A. Dodge; Ward Six, George D. Chamberlain; Ward Seven, John L. Scott; Ward Eight, Ralph W. Wight.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, J. Frank Drake; Ward One, Joseph G. Merrick, Wilfred S. Armitage; Ward Two, James A. Sullivan, John J. Walsh, Jeremiah McCarthy; Ward Three, Albert A. Mathews, George W. Streeter; Ward Four, Everett E. Belding, George Marston Leonard; Ward Five, Robert N. Ingersoll, J. Frank Drake; Ward Six, Matthew H. Farrell, Patrick W. Russell; Ward Seven, Julian R. Albee, Edward T. Broadhurst; Ward Eight, Charles M. Goodwin, John G. Maxfield, Miller J. Meeker.

CLERK—H. S. Gilbert (resigned), George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1911.

MAYOR—EDWARD H. LATHROP.

ALDERMEN—President, Ralph W. Wight; Ward One, Edward S. Goldthwaite; Ward Two, Henry Lasker; Ward Three, H. Goodman Waters; Ward Four, John A. Denison; Ward Five, William A. Dodge; Ward Six, Frank E. Stacy; Ward Seven, Charles B. Hitchcock; Ward Eight, Ralph W. Wight.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, J. Frank Drake; Ward One, Wilfred S. Armitage, George S. Cook; Ward Two, John P. Cannon, William H. Grady, Jeremiah McCarthy; Ward Three, George W. Streeter, George W. D. Upton; Ward Four, Everett E. Belding, George Marston Leonard; Ward Five, Charles A. Allbe, J. Frank Drake; Ward Six, Matthew H. Farrell, Patrick W. Russell; Ward Seven, Julian R. Albee, Edward T. Broadhurst; Ward Eight, Charles M. Goodwin, John G. Maxfield, Miller J. Meeker.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1912.

MAYOR—EDWARD H. LATHROP.

ALDERMEN—President, John A. Denison; Ward One, Edward S. Goldthwaite; Ward Two, Henry Lasker; Ward Three, H. Goodman Waters; Ward Four, John A. Denison; Ward Five, William A. Dodge; Ward Six, Frank E. Stacy; Ward Seven, Charles B. Hitchcock; Ward Eight, John G. Maxfield.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, J. Frank Drake; Ward One, George S. Cook, Charles J. Jefferson; Ward Two, John P. Cannon, William H. Grady, John J. Walsh; Ward Three, George W. Streeter, George W. D. Upton; Ward Four, Robert P. Marsh, George W. Pike; Ward Five, Charles A. Allbe, J. Frank Drake; Ward Six, Henry Martens, Patrick W. Russell; Ward Seven, Julian R. Albee, Edward T. Broadhurst; Ward Eight, Giles Blague, Charles M. Goodwin, George A. Lanciaux.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1913.

MAYOR—JOHN A. DENISON.

ALDERMEN—President, Henry Lasker; Ward One, George S. Cook; Ward Two, Henry Lasker; Ward Three, George H. McClean; Ward Four, Harry G. Webster; Ward Five, Robert N. Ingersoll; Ward Six, Frank E. Stacy; Ward Seven, Julian R. Albee; Ward Eight, John G. Maxfield.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Edward T. Broadhurst; Ward One, Louis G. Erickson, Charles J. Jefferson; Ward Two, William H. Grady, John H. Morgan, John J. Walsh; Ward Three, Nelson W. Haskell, George W. Streeter; Ward Four, Robert P. Marsh, George W. Pike; Ward Five, Charles A. Allbe, Harold A. Wheat; Ward Six, Henry Martens, Thomas F. McGlynn (resigned), Patrick W. Russell; Ward Seven, Albert B. Franklin, Jr., Edward T. Broadhurst; Ward Eight, Giles Blague, George A. Lanciaux, William B. Sleigh.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1914.

MAYOR—JOHN A. DENISON.

ALDERMEN—President, Frank E. Stacy; Ward One, George S. Cook; Ward Two, Albert P. Hare; Ward Three, George H. McClean; Ward Four, Harry G. Webster; Ward Five, Robert N. Ingersoll; Ward Six, Frank E. Stacy; Ward Seven, Julian R. Albee; Ward Eight, Giles Blague.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Edward T. Broadhurst; Ward One, Louis G. Erickson, Lawrence P. Griffin; Ward Two, William H. Grady, John H. Morgan, John R. Doyle; Ward Three, Nelson W. Haskell, Fred A. Morrill; Ward Four, Robert P. Marsh, Albert D. Shaw; Ward Five, William Foster, Harold A. Wheat; Ward Six, Henry Martens, John J. O'Hare; Ward Seven, Albert B. Franklin, Jr., Edward T. Broadhurst; Ward Eight, Clinton W. Cowles, George A. Lanciaux, William B. Sleigh.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1915.

MAYOR—FRANK E. STACY.

ALDERMEN—President, George S. Cook; Ward One, George S. Cook; Ward Two, Albert P. Hare; Ward Three, Nelson W. Haskell; Ward Four, Harry G. Webster; Ward Five, Samuel C. Hall; Ward Six, Henry Martens; Ward Seven, Albert B. Franklin, Jr.; Ward Eight, Giles Blague.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Edward T. Broadhurst; Ward One, Emil J. Erard, Lawrence P. Griffin; Ward Two, William H. Grady, William J. Granfield, John R. Doyle; Ward Three, William L. Fuller, Fred A. Morrill; Ward Four, Robert P. Marsh, Albert D. Shaw; Ward Five, Seth H. Barlow, William Foster; Ward Six, Silvio Martinelli, William C. B. Merriam; Ward Seven, Edward T. Broadhurst, Henry H. Caswell; Ward Eight, Clinton W. Cowles, George A. Lanciaux, Albert B. Sanderson.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1916.

MAYOR—FRANK E. STACY.

ALDERMEN—President, George S. Cook; Ward One, George S. Cook; Ward Two, Albert P. Hare; Ward Three, Nelson W. Haskell; Ward Four, Robert P. Marsh; Ward Five, Samuel C. Hall; Ward Six, Henry Martens; Ward Seven, Albert B. Franklin, Jr.; Ward Eight, Giles Blague.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Albert D. Shaw; Ward One, Emil J. Erard, Lawrence P. Griffin; Ward Two, William H. Grady, William J. Granfield, John R. Doyle; Ward Three, William L. Fuller, Fred A. Morrill; Ward Four, Christopher G. Simpson, Albert D. Shaw; Ward Five, Seth H. Barlow, William Foster; Ward Six, Silvio Martinelli, Ambrose H. Reynolds; Ward Seven, Alfred H. Chapin, Henry H. Caswell; Ward Eight, Clinton W. Cowles, G. Clarence A. Fuller, Albert B. Sanderson.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1917.

MAYOR—FRANK E. STACY.

ALDERMEN—President, Giles Blague; Ward One, John J. Lester; Ward Two, Albert P. Hare; Ward Three, Nelson W. Haskell; Ward Four, Robert P. Marsh; Ward Five, Samuel C. Hall; Ward Six, Henry Martens; Ward Seven, Henry H. Caswell; Ward Eight, Giles Blague.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Albert D. Shaw; Ward One, C. Burton Gibbs, Lawrence P. Griffin; Ward Two, William H. Grady, John R. Doyle, John A. Fitzgerald; Ward Three, Fred A. Morrill, Harold P. Small; Ward Four, Albert D. Shaw, James P. Smith; Ward Five, Seth H. Barlow, Christopher G. Simpson; Ward Six, Ambrose H. Reynolds, Melvin D. Southworth; Ward Seven, Alfred H. Chapin, Arthur G. Taylor; Ward Eight, G. Clarence A. Fuller, Arthur Alfred Beth, George H. Decker.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1918.

MAYOR—FRANK E. STACY.

ALDERMEN—President, Henry H. Caswell; Ward One, John J. Lester; Ward Two, Edwin F. Leonard; Ward Three, Nelson W. Haskell; Ward Four, Charles A. Allbe; Ward Five, James F. Walls; Ward Six, Melvin D. Southworth, resigned, Clifford D. Castle elected; Ward Seven, Henry H. Caswell; Ward Eight, G. Clarence A. Fuller, resigned, Fred A. Eldred elected.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Christopher G. Simpson; Ward One, C. Burton Gibbs, Emile J. Erard; Ward Two, William H. Grady, John R. Doyle, John A. Fitzgerald; Ward Three, Ambrose H. Reynolds, Harold P. Small; Ward Four, Archer R. Simpson, James P. Smith; Ward Five, Seth H. Barlow, Christopher G. Simpson; Ward Six, George L. Fenn, Clifford D. Castle, resigned, Frank M. Kinney elected; Ward Seven, Frederick Kattler, Arthur G. Taylor; Ward Eight, Victor Bengle, Arthur Alfred Beth, George H. Decker.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1919.

MAYOR—ARTHUR A. ADAMS.

ALDERMEN—President, Henry H. Caswell; Ward One, John J. Lester; Ward Two, Edwin F. Leonard; Ward Three, George Edward Mansfield, Jr.; Ward Four, Charles A. Allbe; Ward Five, Seth H. Barlow; Ward Six, Clifford DeW. Castle; Ward Seven, Henry H. Caswell; Ward Eight, Arthur Alfred Beth.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Christopher G. Simpson; Ward One, Charles McMorrow, Emile J. Erard; Ward Two, William H. Grady, John R. Doyle, Eugene J. Sweeney; Ward Three, Ambrose H. Reynolds, Max J. Baker; Ward Four, Archer R. Simpson, Richard C. Gaige; Ward Five, Eli F. Millett, Christopher G. Simpson; Ward Six, George L. Fenn, Frank M. Kinney; Ward Seven, Frederick Kattler, Arthur G. Taylor; Ward Eight, Victor Bengle, Thomas H. Benton, Vernon D. Odette.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

CITY OFFICERS FOR 1920.

MAYOR—ARTHUR A. ADAMS.

ALDERMEN—President, John J. Lester; Ward One, John J. Lester; Ward Two, Edwin F. Leonard; Ward Three, George Edward Mansfield, Jr., resigned, Harvey W. Van Allen, elected; Ward Four, Charles A. Allbe; Ward Five, Seth H. Barlow; Ward Six, Frank M. Kinney; Ward Seven, Arthur G. Taylor; Ward Eight, Arthur Alfred Beth.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Archer R. Simpson; Ward One, Charles McMorrow, Emile J. Erard; Ward Two, John R. Doyle, Eugene J. Sweeney, Denis A. Hogan; Ward Three, Max J. Baker, James Edward Davis; Ward four, Archer R. Simpson, Richard C. Gaige, resigned, Francis H. Baines, elected; Ward Five, Eli F. Millett, Raymond B. Shattuck; Ward Six, Fred E. Carlisle, resigned, Charles H. Bump, Jr., elected, Leonard S. Stebbins; Ward Seven, Frederick Kattler, Aime H. Cote; Ward Eight, Victor N. Bengle, Thomas H. Benton, resigned, William S. Stephenson, elected, Vernon D. Odette.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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CITY OFFICERS FOR 1921.

MAYOR—EDWIN F. LEONARD.

ALDERMEN—President, John J. Lester; Ward One, John J. Lester; Ward Two, Arthur W. Brown; Ward Three, Harvey W. Van Allen; Ward Four, Charles A. Allbe; Ward Five, Raymond B. Shattuck; Ward Six, Frank M. Kinney; Ward Seven, Aime H. Cote; Ward Eight, Marcus H. Smith.

CLERK—Elijah A. Newell.

COMMON COUNCILMEN—President, Archer R. Simpson; Ward One, Emile J. Erard, Edward P. Slattery; Ward Two, Eugene J. Sweeney, Denis A. Hogan, James P. Manning; Ward Three, Max J. Baker, James Edward Davis; Ward Four, Archer R. Simpson, Francis H. Baines; Ward Five, Fred H. Clarkson, A. Olin Sinclair; Ward Six, Leonard S. Stebbins, Charles H. Bump, Jr.; Ward Seven, Archie E. Bruce, Robert Berry; Ward Eight, Victor N. Bengle, Vernon D. Odette, William Kirk Kaynor.

CLERK—George J. Clark.

CITY CLERK—Elijah A. Newell.

CITY TREASURER—Eliphalet T. Tifft.

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